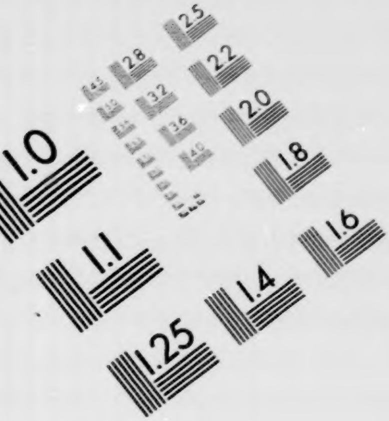

1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5

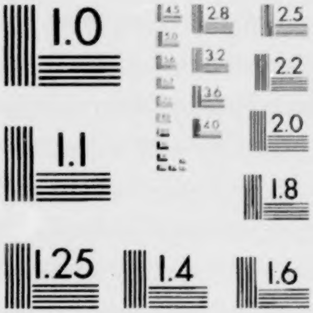
AIIM

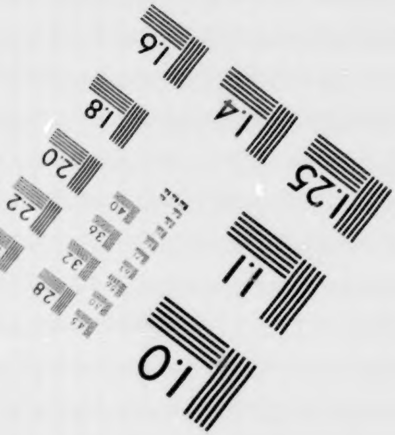
Association for Information and Image Management

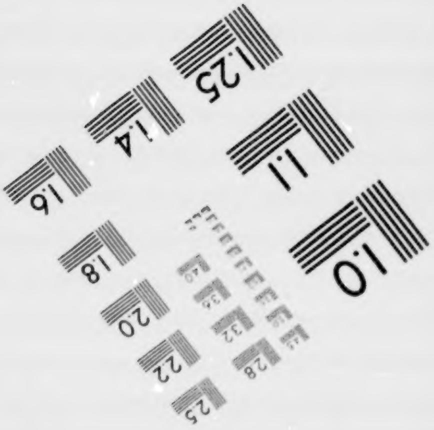
1100 Wayne Avenue, Suite 1100
Silver Spring, Maryland 20910
301/587-8202

1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5

Centimeter
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
mm
1
2
3
4
5
Inches


1.0
4.5
2.8
2.5
5.0
3.2
2.2
5.6
3.6
6.3
2.0
7.1
4.0
1.1
8.0
1.8
1.25
1.4
1.6


1.6
1.8
1.4
2.0
1.25
2.2
1.1
2.8
3.2
3.6
4.0
4.5
1.0


1.25
1.1
1.4
1.6
1.0
1.8
2.0
2.2
2.8
2.5

MANUFACTURED TO AIIM STANDARDS
BY APPLIED IMAGE, INC.

DOCUMENT RESUME

ED 466 099 FL 027 356

AUTHOR	Dutcher, Nadine
TITLE	Expanding Educational Opportunity in Linguistically Diverse Societies.
INSTITUTION	Center for Applied Linguistics, Washington, DC.
SPONS AGENCY	Ford Foundation, New York, NY.
PUB DATE	2001-10-00
NOTE	125p.
AVAILABLE FROM	Center for Applied Linguistics, 4646 40th Street, N.W., Washington, DC 20016-1859. Tel: 202-362-0700; Fax: 202-362-3740; e-mail: info@cal.org; Web site: http://www.cal.org.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Access to Education; Curriculum Development; Educational Innovation; Elementary Education; Equal Education; Foreign Countries; *Language of Instruction; Leadership; *Multilingualism; Program Development
IDENTIFIERS	Bolivia; Cameroon; Cote d Ivoire; Eritrea; Ethiopia; Guatemala; Indonesia; Language Policy; Mali; Mexico; Namibia; *Native Language; Papua New Guinea; Philippines; Vietnam

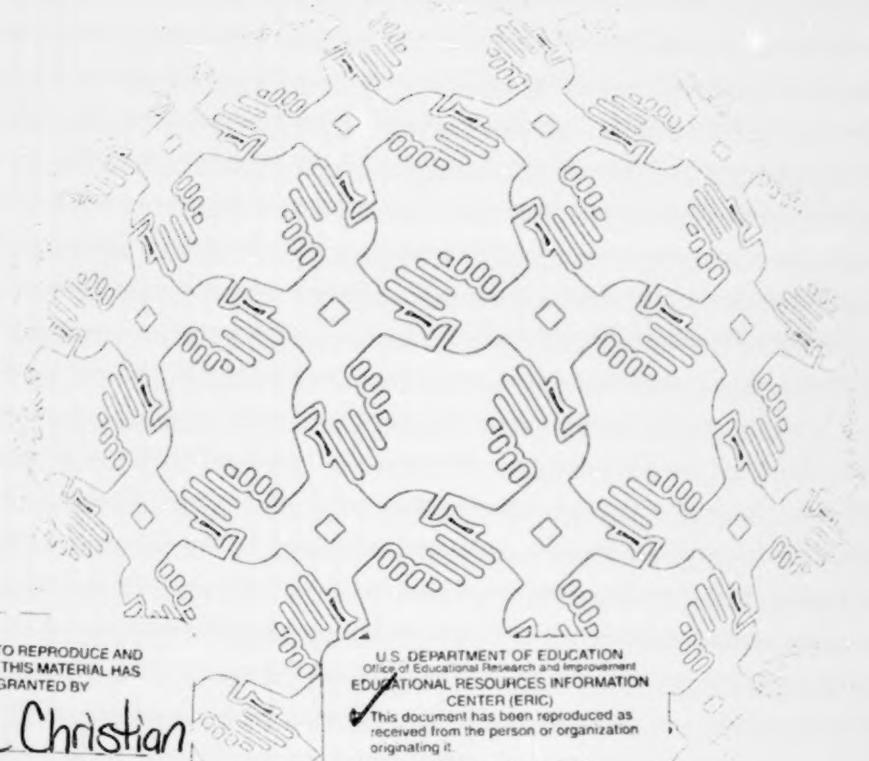
ABSTRACT

This report provides information designed to encourage those working in international education to directly confront "language problems" by considering the effectiveness and feasibility of initial education in the mother tongue or local language. It serves as a bridge between applied linguistics and developmental education, exploring educational limitations arising from language barriers and innovative ways in which these limitations have been addressed. It describes successful and innovative programs that multilingual countries have implemented to expand educational opportunity, especially for underserved groups, clarifying replication of these programs in other countries and emphasizing the need for leadership on language issues. Chapter 1 reviews the international context for language in education and the importance of initial education in the mother tongue. Chapters 2 and 3 discuss promising and innovative approaches in 13 countries, describing necessary foundation work and external support. Chapter 4 outlines opportunities for assistance, emphasizing the importance of global leadership on language issues. Chapter 5 offers observations on the relationships between language and school access, equity, and quality and the importance of making innovative education programs the norm in multilingual countries. Appendixes contain summaries of the 13 innovative programs and an annotated list of key organizations. (Contains 111 references.) (SM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

Expanding Educational Opportunity In Linguistically Diverse Societies

ED 466 099



PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

Donna Christian

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)
1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

CAL
CENTER FOR APPLIED LINGUISTICS

Expanding Educational Opportunity In Linguistically Diverse Societies

CAL © 2001 Center for Applied Linguistics Washington DC

The work reported herein was supported by a grant from the Ford Foundation. However, the contents do not necessarily represent the positions or policies of the Ford Foundation.

Expanding Educational Opportunity In Linguistically Diverse Societies

CAL
Center for Applied Linguistics

Executive Summary

Education for All

In 1990, the United Nations Development Program, UNESCO, UNICEF, and the World Bank sponsored a conference on Education for All (EFA) in Jomtien, Thailand, at which government and non-government representatives from more than 100 nations arrived at a global consensus on an expanded vision of basic education. Conference participants committed their countries and institutions to six goals for improvements in basic education. The second of these goals was "access to and completion of primary education for all the world's children by the year 2000" (UNICEF, 1999a).

In the decade that followed, progress was disappointing. At the World Education Forum in Dakar, Senegal in 2000, representatives from more than 180 nations found that millions of children, mostly girls, still had no access to primary education; millions of adults were still illiterate; gender discrimination continued to permeate education systems; and the quality of learning still fell short of the needs of societies. Forum participants signed a Framework for Action that pledged improvements in all aspects of the quality of education (UNESCO, 2000b).

In 2001, the heads of the United Nations agencies responsible for the Education for All movement reviewed the situation and reiterated that it is unacceptable for over 113 million primary school age children, more than 60 percent of whom are girls, to be denied the chance to go to school, as is the case in the developing world today. They reaffirmed the importance of education and restated the new EFA goals, notably elimination of gender disparities at all levels of education by 2005, and completion by all children of the full course of primary education by 2015 (UNESCOPRESS/No. 2001-66-2).

Does Education for All Mean Everyone?

In a recent seminar at the World Bank, Susan Malone, an SIL International linguist with years of experience as an educator in Papua New Guinea, Peru, and elsewhere, raised the obvious question: Does Education for All include everyone? Does it include relevant education for minority language communities (Malone, 2001)?

Over 6,000 languages are spoken in the world today. Approximately 1.38 billion people are speakers of local languages, languages that may not be used for formal education because they are as yet unwritten or are deemed unsuitable for other reasons. If an average of 16 percent of the population of developing countries is of school age, then an estimated 221 million school-age children today are speakers of these lesser-known or unwritten languages. Some of them will be in school struggling to take advantage of the education being offered; many will drop out early for lack of success; still others will not be able to enroll at all (Walter, personal communication, 2001).

What do the manifestos of the international conferences say about language as a barrier to expanding educational opportunity?

Nothing.

This silence is shocking because of the evidence in hundreds of published and unpublished works that failure to use the mother tongue for initial education is a significant factor in the failure to provide equal educational opportunity to all children. Children who speak only local languages may lack physical access to school because of shortages of school buildings and teachers. However, in many cases, even when these children have access to schools, they are denied educational opportunity. They attend classes taught by teachers speaking, often poorly, a language the children do not understand and through which they therefore cannot learn. As a result, many children drop out before finishing even the primary cycle, without mastering skills in their first language, not to mention skills in the official language, the language of instruction.

In addition to the cognitive factors, there are emotional ones. Members of minority ethnic groups, whether children or adults, are empowered when their first language is used. Conversely, when the mother tongue is not used, they are made to feel awkward, inferior, and stupid. Their culture is denigrated, and the children are scared, confused, and traumatized. This has long-term effects.

Is Language in Education Always Neglected?

In spite of the lack of recognition on a global level of the role that language plays in perpetuating the education crisis, on the national and local levels there are signs of change. Many countries have initiated innovative programs that begin instruction in the children's first language, bridging successfully to a second language that is a language of wider communication. Children in these programs have the opportunity to develop their cognitive skills, including reading and writing, through their first language while acquiring the basis for learning the second language. As a result, they secure their identity within their own group and gain the ability to participate in the wider society within and outside their countries.

Focus of This Report

These innovative programs are the focus of this report. We review ongoing programs in 13 countries: Bolivia, Cameroon, Eritrea, Ethiopia, Guatemala, Indonesia, Ivory Coast, Mali, Mexico, Namibia, Papua New Guinea, the Philippines, and Vietnam. All of the programs have been successful in some ways in expanding educational opportunity in their linguistically diverse societies. We describe how these programs begin and what must happen to help them succeed. We discuss language development and language planning, materials development, teacher training, teaching methodologies, research and evaluation, and the many problems which must be overcome.

Call for Leadership

We conclude with a call for international leadership on language and education. What would international leaders do? They would work in three areas: research, pilot programs, and international advocacy.

First, they would encourage and support research in countries whose programs educate children through a language the children know while helping them acquire a second language which may have wider economic or political value. Leaders would support meta-analyses of these studies, helping to build a convincing and credible body of research and experience to convince donors and governments that such programs are possible, practical, and useful.

Second, international leaders would sponsor or co-sponsor well-run pilot programs in countries where there is support for mother tongue instruction. They would encourage government-approved program development, including curriculum and materials development; teacher recruitment, training, and supervision; program expansion; and effective measures for building community and national support.

Finally, international leaders would insert into the agenda of worldwide conferences the issue of the language of instruction. They would call other meetings to focus on language in education, bringing together the major players–country representatives, donor organizations, non-governmental organizations, academics, and grassroots language workers–to discuss issues and share experience and research. They would emphasize possibilities as well as problems, stressing the importance of both quality education in a language known to the child and the opportunity later on to learn an international language.

In the words of G. Richard Tucker of Carnegie Mellon University, international leaders would encourage educators to

> *begin innovative language education programs that will lead to bilingual or multilingual proficiency for participants as early as possible. The graduates of such programs will be culturally rich, linguistically competent and socially sensitive individuals prepared to participate actively in our increasingly global economy (Tucker, in press).*

If indeed these graduates achieve all of that, and still remain rooted in their own cultures and identities, we can at last say that there is hope for Education for All!

Table of Contents

Acknowledgements

Introduction 1

Purposes of the Report 1
Clarifications 2
Methodology 2
Organization of the report 3

I. Education for All? 4

International Conferences and Leadership 4
What Is Missing in These Calls for Action? 6
The Importance of the Mother Tongue in Education 7
What is the Evidence of the Importance of the Mother Tongue? 10
Linguistic Human Rights 12

II. Using Mother Tongues in the Classroom: Foundation Work 14

First Steps 14
  The Beginning 14
  Language Development and Language Planning 16
The Classroom 19
  Curriculum and Materials 19
  Teacher Recruitment, Training, and Professional Development 20
  Methodology 22
  Research and Evaluation 23

III. Using Mother Tongues in the Classroom: The External Support Needed 28

Levels of Support 28
  National Government 28
  Ministry of Education 29
  Community Involvement and Control 30
  Support from All Levels within the Country 31
Ongoing Program Development – Going to Scale 31
Role of Outside Agencies 34

IV. Opportunities for Assistance **37**

Global Leadership 37
  Candidates 37
  Actions 39
Country Assistance 40
  Language Development and Language Planning 41
  Advocacy and Outreach 41
  Program Planning 42
  Curriculum and Materials Development 42
  Teacher Training and Recruitment 42
  Research and Evaluation 44

V. Conclusion **45**

Annex A: Summary of Programs Discussed **49**

Annex B: Organizations **101**

Annex C: References **107**

Introduction

This report was originally written at the request of the Ford Foundation, an independent, nonprofit non-governmental organization working nationally and internationally to strengthen democratic values, reduce poverty and injustice, promote international cooperation, and advance human achievement. The original purpose was to provide a background for discussion of how to expand educational opportunity in linguistically diverse societies.

The present work is an expansion of the original report to the Ford Foundation. Its overall purpose is to provide a background that will encourage those working in international education to confront directly what many consider "language problems" by considering the effectiveness and feasibility of initial education in the mother tongue or local language. Like the original report, this document serves as a bridge between two disciplines, applied linguistics and developmental education, exploring the educational limitations arising from language barriers and the innovative ways in which those limitations have been addressed.

Nadine Dutcher is the principal author of the report. Dora Johnson of the Center for Applied Linguistics located source materials and compiled information. Pascal Kokora of Georgetown University submitted material on Cameroon and the Ivory Coast. Penelope Bender of the World Bank wrote much of the program summary on Mali, and Grace Lang of the World Bank corrected portions of the program summary on Namibia. Donna Christian of the Center for Applied Linguistics and G. Richard Tucker of Carnegie Mellon University read earlier versions of the report, guiding both its shape and its content. Stephen L. Walter (SIL International) and David Klaus, researchers in language of instruction issues around the world, reviewed the semi-final draft, recommending ways of clarifying information and strengthening arguments. Finally, Deborah Kennedy of Key Resources was responsible for editing into this final draft form.

Purposes of the Report

This report has three purposes. The first is to describe successful and innovative programs that multilingual countries have implemented to expand educational opportunity, especially for underserved groups. The second is to clarify possibilities for replication of those programs in other countries. These two purposes were present when the Center for Applied Linguistics (CAL) began this work.

Out of the work came a third purpose: To persuade others of the need for leadership on language issues. As we learned what countries were attempting to achieve in the expansion of educational opportunity, we noted the lack of attention given to language issues and the misconceptions that were evident when attention was paid. We noted the lack of priority given to language policy by multilateral and bilateral aid organizations, the lack of organized research and information accumulation across countries, and the absence of serious discussion at the international level. We will have more to say about this later.

Clarifications

We begin with two clarifications. First, in this report the phrase *expanding education opportunity* will embrace four concepts: expanding access, improving efficiency, enhancing quality, and achieving equity. In most reports on education, "expanding access" refers only to expanding physical access, that is, building classrooms; many countries do not have sufficient classrooms to meet the parental demand for schooling. "Improving efficiency" usually refers to accelerating the rate at which students complete their schooling; many school systems are characterized by a high rate of repeaters or dropouts. "Enhancing quality" usually refers to improving learning. In situations where it is difficult to evaluate improvement, proxies such as number of trained teachers, ratio of teachers to students, and number of texts available in the classroom are used. "Achieving equity" refers to providing opportunity for girls as well as for boys, for children in rural areas as well as for those in the city, and for children who do not know the language of instruction as well as for children who do. For our purposes, expanding education opportunity will mean all of these things, and more.

Second, the wording used in the title, *linguistically diverse societies*, is misleading. There are no societies, in the sense of countries or nation-states, that are not linguistically diverse. Furthermore, the phrase "linguistically diverse" might imply that multilingual countries are exceptions to a monolingual norm. In fact, multilingual countries are the norm. In a world of over 6,000 oral languages (and perhaps another 6,000 sign languages), there is no country whose residents all speak one language, either as their mother tongue or as a second or third language. There are sharp contrasts, of course: "Megadiversity" countries such as Papua New Guinea (over 800 languages), Indonesia (650 languages), Nigeria (410 languages), and India (380 languages) contrast with countries with few languages such as Japan (14 languages) and Ireland (4 languages). Only North Korea, isolated as it is, is listed as having only one language (Grimes, 2000). *To repeat, there are for all practical purposes no monolingual countries.*

Methodology

Our information on promising practices and innovative programs derives from careful reading of psycholinguistic research, extensive interviews in international education and aid networks, and reviews of materials produced by international agencies and private researchers in English, French and Spanish. We have also relied on knowledge gained during visits to many of the countries discussed, namely Bolivia, Cameroon, Eritrea, Ethiopia, Guatemala, Ivory Coast, Mali, Namibia, and Papua New Guinea, as well as visits to bilingual education programs in countries not directly considered here, namely Paraguay, Peru, and Vanuatu. While the survey is not exhaustive, the range of cases is diverse enough to provide useful guidance on a broad scale (see Annex A for program summaries and Annex C for list of materials and people consulted).

We used four criteria for selection of the innovative programs discussed in this report. First, they confront language issues directly, usually by beginning education in the first language or mother tongue. Second, they have had success in expanding educational opportunities to previously underserved groups. Third, they are ongoing. Fourth, they were represented by materials or people available to us.

Organization of the Report

Chapter I reviews the international context for language in education, as well the importance of initial education in the mother tongue. Chapters II and III present promising approaches and innovative programs in 13 countries; Chapter II focuses on the foundational work required for using mother tongues in the classroom, and Chapter III on the external support needed for such an approach. Chapter IV outlines opportunities for assistance, emphasizing the importance of global leadership on language issues. Chapter V closes with some observations on the relationships between language and school access, equity, and quality, and the importance of making innovative education programs the norm in multilingual countries.

Annex A contains summaries of the innovative programs reviewed in the 13 countries. Annex B is an annotated list of key organizations. Annex C is a list of the materials and people consulted for the report.

I. Education For All?

Before we discuss what we learned in our review of experiences in the 13 countries, it is important to explore the international context.

International Conferences and Leadership

The past decade has been the decade of Education for All. In 1990, in an attempt to address the fact that millions of the world's children were unable to attend school, representatives from more than 100 countries attended the World Conference on Education for All in Jomtien, Thailand. Co-sponsored by UNESCO, the United Nations Development Programme (UNDP), the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA) and the World Bank, the conference generated a global consensus on an expanded vision of basic education. It aimed to galvanize the international community into action by establishing six key goals:

1. expansion of early childhood care and development, especially for the poor;
2. universal access to and completion of primary education by the year 2000;
3. improvement in learning achievement based on an agreed-upon percentage of an age group (e.g., 80 percent of 14-year-olds) attaining a defined level;
4. reduction of the adult illiteracy rate to half its 1990 level by the year 2000 with special emphasis on female literacy;
5. expansion of basic education and training for youth and adults; and
6. improved dissemination of the knowledge, skills and values required for better living and sustainable development (UNICEF, 1999a).

In the decade that followed, progress was disappointing. Primary enrollments did increase; about 50 million more children were in school in 1995 than in 1990. However, the increase only kept pace with the growth in the number of children entering the 6- to 11-year-old age group over the period. Many millions of children of primary school age were still not in school, and millions of other children who were able to start school for various reasons had to drop out before they reached Grade 5 (UNICEF, 1999a).

Ten years later, aware of the relative lack of progress in reaching the goal of universal primary education, the international community renewed its commitment to achieving quality basic education for all. In April, 2000 about 1,500 participants from over 180 countries met at the World Education Forum in Dakar, Senegal. Conveners were UNDP, UNESCO, UNFPA, UNICEF, and the World Bank. As a follow-up to the 1990 World Conference on Education for All, participants emphasized that, despite significant progress in many countries, it was not acceptable that more than 113 million children (about 60 percent girls) still had no access to primary education. The conference pledged to achieve the following goals:

1. expand and improve early childhood care and education;
2. ensure that by 2015 all children, especially girls, children in difficult circumstances, and

children from ethnic minorities, have access to complete free and compulsory primary education of good quality;
3. ensure that learning needs of all young people are met through learning and life skills programs;
4. achieve 50 percent improvement in adult literacy by 2015;
5. eliminate gender disparities in primary and secondary education by 2005; and
6. improve all aspects of the quality of education (UNESCO, 2000b).

In 2001, on the first anniversary of the World Education Forum, the heads of the five agencies responsible for the Education for All movement reviewed the current situation and identified ongoing needs. In a joint statement, *Harness the Power of Education,* the UNESCO Director-General, the Executive Director of the United Nations Population Fund, the Executive Director of the United Nations Children's Fund, the Administrator of the United Nations Development Programme, and the President of the World Bank reiterated "the challenge posed by the Dakar World Education Forum:"

> ***More than 113 million primary school age children are denied the chance to go to school in the developing world today.*** *Well over 60 percent are girls. The world's failure to give these children even the basic building blocks of literacy and the ability to transform their lives will have profound consequences, not only for their home countries, but for the rest of the global community for generations to come (UNESCO, 2001, our emphasis).*

The five leaders continued with the rationale for Education for All:

> *The international community knows that the rationale for making good quality education universally available is compelling. It contributes to economic well-being and cohesive, stable communities; and it empowers poor people to boost their incomes and leave the pain of poverty behind. No country has ever achieved sustained economic growth without reaching the critical threshold of literacy for its population. Another way education transforms lives is through equal schooling opportunities for girls, since they correlate closely with women's choices later in life, the number of children they have, the survival rates of their infants, how their children perform at school, and how productive their livelihoods subsequently become, all of which have a direct bearing on national economic growth (UNESCO, 2001).*

The leaders noted that, although many developing nations have made progress toward meeting the principal goals of the Dakar World Education Forum, a number of others would be unable to meet them without special efforts. Those goals are:

- by 2015, completion by all children of the full course of primary education, and
- by 2005, elimination of gender disparities at all levels of education.

The leaders noted that obstacles to meeting the goals included lack of financial resources, conflicts which have produced hundreds of war orphans and child soldiers, and the devastating impact of the HIV/AIDS pandemic, especially in Africa and increasingly in South Asia.

The leaders concluded with a challenge to countries and to the international community:

> *Country leadership on education expansion and reform is urgently needed....We are encouraging [countries] to involve all stakeholders — partners, teachers, and civil society — in the process....Multilateral...and bilateral agencies also have a critical role to play. They can, and must, stimulate and support country-led education reforms....[The international community must also] mobilize resources for education...to get all primary school age children into school (UNESCO, 2001).*

What Is Missing in These Calls for Action?

There is no reference to the role of the language of instruction. Most countries which have not achieved universal primary education offer formal schooling in a language which is foreign to the child and his or her family. That language may be the former colonial language or another language chosen for its economic or political prestige.

At the 1990 Education for All conference in Jomtien, Shirley Brice Heath, a linguist at Stanford University, led a session which aimed to raise the profile of language. At the 2000 World Education Forum in Dakar there was also such a session, organized by Clinton Robinson, a linguist at SIL International. However, no references were made to the language issue in the plenary sessions, and we have found no consideration of it in the resulting documents. Officially, then, there is no reference to the fact that millions of children are entering school without knowing the language of instruction. They are unable to understand the teacher and follow the lesson because the language they speak at home is not the language of school (and often not even the language of the teacher). Language would appear to be a non-issue to the international community. Yet we know that it is not.

In a 2001 seminar at the World Bank, Susan Malone, a linguist from SIL International with years of experience in Papua New Guinea, Peru, and elsewhere, asked, Does education for all include everyone? Does it include relevant education for minority language communities? The only education available to most indigenous language groups, especially in the poorer countries of the world, is in a language they neither speak nor understand. The consequences of this kind of education are predictable: high attrition rates and, often, relapse into semi-literacy or illiteracy (Malone, 2001).

Earlier we mentioned that at least 6,000 oral languages are spoken in the world today. According to one analysis, there are now at least 1.38 billion people who are speakers of lesser known or as yet unwritten languages. If we use an average ratio for developing countries of 16 percent of the population being of school age (probably a low ratio), we can estimate that 221 million school-age children living today are speakers of these lesser known or as yet unwritten languages. Some of them will be in school struggling to take advantage of the education being offered; many will drop out early for lack of success; still others will not be able to enroll at all. This does not include speakers of highly developed languages living in the industrialized countries. such as Hispanics in the United States or Francophones in Canada (Walter, personal communication, 2001).

Over the past decade there has been a striking lack of leadership on language at the international level. In 1990, Courtney Cazden of Harvard University wrote in a report to UNICEF,

> *Despite the centrality of language achievements in the developmental agenda of the child, language issues are rarely in the forefront of thinking about how to plan environments for young children....The prevalence of multilingualism in the world adds a particular urgency to the recommendation to attend to the quality of language instruction available to the child (Cazden, Snow, & Heise-Baigorria, 1990, p. 48).*

Recently, Tove Skutnabb-Kangas, a linguist and researcher now living in Denmark, wrote much more forcefully,

> *Illiteracy could be eradicated within a decade. A wrong educationah language policy in underdeveloped countries, in many cases promoted, advocated, and partially financed by the West with its experts, is the most important pedagogical reason for illiteracy in the world, and the most efficient way of preventing the grassroots from organised resistance to continued neocolonial exploitation (Skutnabb-Kangas, 2000, p. 665).*

It is shocking that the international dialogue on Education for All has not confronted the problems that children face when they enter school not understanding the medium of instruction, when they are expected to **learn** a new language at the same time as they are learning **in** and **through** the new language. **The basic problem is that children can not understand what the teacher is saying!** We believe that if international planners had faced these issues on a global scale to begin with, there would have been progress to report. However, instead of making changes that would lead to real advancement, the international community has simply repledged itself to the same goals, merely moving the target ahead from the year 2000 to 2015.

Until international leaders face the learning problems that their policies engender, we can predict that the numbers of children enrolled in school will increase, but overall the proportion of children who lack literacy and numeracy skills will remain the same.

The Importance of the Mother Tongue in Education

Educators have known the value of teaching in the mother tongue for years. In 1951, UNESCO convened a Committee of Experts to consider the question of the language of education worldwide. In its 1953 report, *The Use of Vernacular Languages in Education,* the committee declared,

> *It is axiomatic that the best medium for teaching a child is his mother tongue. Psychologically, it is the system of meaningful signs that in his mind works automatically for expression and understanding. Sociologically, it is a means of identification among the members of the community to which he belongs. Educationally, he learns more quickly through it than through an unfamiliar linguistic medium (UNESCO, 1953, p. 11).*

Yet international and national organizations have been reluctant to address the matter. Schools have failed to provide quality education to children in a language the children understand and in which their parents can relate to school authorities. As a result, many children learn neither the content subjects, such as reading and mathematics, nor the higher prestige language of instruction. They fail in their studies, repeat grades, and then drop out without finishing even the primary cycle.

UNICEF is the one exception to the lack of attention to language in policy discussions. As stated in UNICEF's *State of the World's Children 1999,*

> *If the medium of instruction is not the language spoken at home, particularly when parents are illiterate, then learning problems accumulate, and chances of dropping out increase. On the other hand, there is ample research showing that students are quicker to learn to read and acquire other academic skills when first taught in their mother tongue. They also learn a second language more quickly than those initially taught to read in an unfamiliar language (UNICEF, 1999a, p. 41).*

Why has it been so difficult for so many organizations and individuals to address the fact that children need to understand the medium of instruction in order to learn? One reason is that many policymakers believe that teaching young children through one official language, however foreign it may be to the children, is the way to ensure that all citizens can communicate with one another, thus unifying the country and preparing its citizens to participate in the global economy. Unity depends on much more than language policy. As Brian Harlech-Jones has written about Namibia, "[Unity] depends at least as much on economic advancement and an even distribution of wealth, on even-handed justice, on a responsive political system, and on equitable access to the facilities provided by the state" (1998, p. 4).

A second reason is that school authorities and parents do not understand the difficulties children face in learning a second language for academic purposes. They believe that children learn language easily, and they have confused the process of learning a language with that of learning through a language (which has to be known to both teacher and student). Children do learn oral languages easily when they have good models for the language and when they are motivated, but learning academic language takes much more time. School authorities and parents do not always understand the importance of the first language, first as the basis for learning the skills of reading and writing, and then as a basis for acquiring a second academic language.

In addition, the problems involved may seem insurmountable, especially when the country has many indigenous languages. Resources may be inadequate for instruction even in one language, let alone instruction in several other languages. Also, there may be a fear of offending political sensitivities, increasing ethnic tensions, or contributing to national disunity.

A final reason is the influence of power relations on linguistic policy. This view has gained many adherents in recent years. A few quotations:

> *In Africa, the power elite have maintained the colonial languages, of which only they are masters, as a way of ensuring their access to information, and thus preventing self-determination and sharing of power by others (Komarek, 1996, p. 16).*
>
> *Formal educational systems participate in maintaining and reproducing unequal power relations, especially between linguistic minorities and others (Skutnabb-Kangas, 2000, preface, p. x).*
>
> *Virtually all theorists...agree that the major causal factors in linguistic minority students' underachievement are sociopolitical in nature: specifically, the coercive pattern of dominant-subordinated group relations in the wider society and the ways in which these coercive relations of power are manifested in the micro-interactions between educators and students in school (Cummins, 2000, p. 103).*

In the United States, where this report was prepared, there are also issues of access to education related to language, as well as quality, efficiency, and equity. Many of the forces at work here are similar to those in other societies. However, the United States experience has been well documented, and while it will be drawn upon in parts of this report, the emphasis will be on experience elsewhere. In most situations in the United States, school systems do not use the mother tongue for initial education of children whose first language is not English, and a reader may ask why we recommend that route for developing countries. Our answer is that in situations where US school systems do foster the first language for initial education and beyond, the results are beneficial (see discussion of Thomas and Collier research below). The fact that weak policies exist in parts of the United States does not justify supporting similar weak policies in other countries.

We cannot overemphasize the importance of the use of the child's first language in school. In a recent review of pedagogical issues in mother tongue and bilingual education, Luis Enrique López, an educator who has long experience with bilingual programs in Bolivia and Peru, spoke at a distance education course on the Language of Instruction for the World Bank Institute. He emphasized the benefits of first language development in schools:

- improved language competencies in the first language;
- better achievement in other subject areas;
- higher level of self-esteem;
- increased community and parent participation; and
- solid foundation for learning a second or third language.

Above all, there is the emotional factor. Members of ethnic groups, whether children or adults, are empowered when their first language is used. Conversely, when the mother tongue is not used, they are made to feel backward, inferior, and stupid. Their culture is denigrated, and the children are scared, confused, and traumatized. This can have long-term effects.

In researching this report, we looked for contrary examples – programs where the language of wider communication had been used successfully for initial education. **We did not find any such examples in programs addressing underserved groups of the developing world.** This is not surprising. When parents are not literate, when teachers are not fully conversant with the language of wider communication, and when children and adults never hear that language except in the classroom, children are unable to learn, repeat their grades, and drop out of school before reaching Grade 3 of the primary cycle. In some urban situations, among the educated elite who had mastered the language of wider communication, initial education was successful in the second language; however, that group is not the target of this report.

What is the Evidence of the Importance of the Mother Tongue?

What is the evidence that children beginning education in their mother tongue will learn both subject matter and the official, often foreign, language of wider communication better than children exposed only to the official language? There are hundreds of reports on this subject, many of which are not easily available. In this report we cite evidence in the evaluations of programs in Bolivia, Guatemala, Mali, and Papua New Guinea. Elsewhere we have written about experiences in Haiti, Mexico, Nigeria, and Sweden, as well as the United States (Dutcher, 1982; Dutcher & Tucker, 1996).

James Cummins, a psychologist at the University of Toronto, is one of the most influential theorists in the field of first and second language learning. He has written about many such programs, and cites a number of them in his most recent book, *Language, Power, and Pedagogy: Bilingual Children in the Crossfire* (Cummins, 2000).

> Kenya (Nairobi): multilingual accomplishments of developmentally disabled adolescents, speaking Kiswahili, Gujerati, Kikuyu, and English (Candelaria-Green, 1996).
>
> Malawi: Chichewa as language of instruction for years 1-4 of primary, with English taught as a subject (Williams, 1996).
>
> Morocco: Arabic and Berber speaking children introduced to French (Wagner, 1998).
>
> Netherlands: Longitudinal research on Turkish students in bilingual schools (Turkish and Dutch) (Verhoeven & Aarts, 1998).
>
> US (Washington, DC): the Oyster Bilingual School (English-Spanish) (Freeman, 1998).

Luis Enrique López (personal communication, 2001) alerted us to two books which contain evaluative material on bilingual education in Bolivia and in Peru. Hector Muñoz presents the UNICEF project in Bolivia that has grown into the current national program there. Nancy Hornberger (1988) cites bilingual education success from the *Proyecto Experimental de Educación Bilingüe-Puno (PEEB)*, the experimental bilingual education project in Puno, Peru, supported by the Germany Agency for Technical Cooperation (GTZ).

Skutnabb-Kangas writes about strong forms of bilingual and multilingual education, in which the aim is to ensure that language minority children continue to maintain and develop their mother tongue up to either a native or near-native level; learn the majority language at a native or near-native level; become biliterate; and achieve academically. She discusses well-established programs, including those for Swedish speakers in Finland, for Finnish speakers in Sweden, and for children in the 15 countries of the European Union through the plural and multilingual European Union schools (Skutnabb-Kangas, 2000, pp. 600-622).

Stephen L. Walter, an SIL International linguist, alerted us to long running projects in bilingual education in eastern Peru. The product of a collaborative relationship between the Peruvian Ministry of Education and SIL International, the projects were begun in the 1950s to bring education (and Spanish) to the peoples of the Amazon Basin. Still ongoing and largely successful, the projects have been extensively analyzed in at least one book (Trudell, 1993) and in two doctoral dissertations from the University of Texas at Arlington (Davis, 1994; Tacelosky, 1998).

In the United States and elsewhere, studies are accumulating that demonstrate that the longer a child can learn reading and other content subjects in his or her first language while learning the second language in a cognitively demanding way, the better the chances of success after elementary school.

One important large-scale study is that conducted by Wayne Thomas and Virginia Collier of George Mason University. Thomas and Collier have analyzed data in 23 school districts in 15 states since 1985, comparing student achievement in six types of programs, four of which offer some degree of instruction through the students' native language. Their findings demonstrate a direct link between amount or duration of mother tongue instruction and average percentile rank on national standardized tests after 11 years of schooling, by type of program. In other words, students performed better on tests in high school if they had some mother tongue instruction in elementary school than they did if they were in all-English programs. In addition, those who received mother tongue instruction for five to six years, as opposed to one to three years, performed better (Thomas & Collier, 1997).

The timing and quality of teaching and learning in the mother tongue and in the second language are critical to helping students achieve on grade level in their second language. Thomas and Collier found three key predictors of academic success. The first is cognitively complex on-grade-level academic instruction through the students' first language, with cognitively complex on-grade-level academic instruction through the second language added later. The second is the use of current approaches to teaching the academic curriculum through two languages. Such current approaches include discovery learning, cooperative learning, and problem solving. The third predictor is a transformed sociocultural context for language minority students' schooling. Here, the instructional goal is to create for the English learner the same type of supportive sociocultural context for learning in two languages that the monolingual native-English-speaker enjoys for learning in English (Thomas and Collier, 1997, pp. 15-16).

Linguistic Human Rights

In 1990, the same year as the Education for All conference, the Convention on the Rights of the Child became international law, nine months after its adoption by the United Nations General Assembly. It has now been ratified by 191 countries. By this ratification, 96 percent of the world's children live in countries that are legally bound to guarantee the full spectrum of child rights: civil, political, social, cultural, and economic. All children must have access to relevant and meaningful education, regardless of their background, where they live or what language they speak.

> *In those States in which ethnic, religious or linguistic minorities or persons of indigenous origin exist, a child belonging to such a minority or who is indigenous shall not be denied the right, in community with other members of his or her group, to enjoy his or her own culture, to profess and practise his or her own religion, or to use his or her own language (Article 30, Convention on the Rights of the Child, <http://www.unicef.org/crc/fulltext.htm>).*

It should be noted that the Convention does not grant the right of the child to education in a language which he or she understands. The child has the right to education and to enjoy his or her culture, but not necessarily at the same time. To remedy this discrepancy, many language educators have joined human rights activists to work for a United Nations statement on linguistic human rights as part of the human rights to which all civilized states subscribe. Skutnabb-Kangas writes,

> *In a civilized state, there should be no need to debate the right to maintain and develop the mother tongue. It is a self-evident, fundamental linguistic human right. Observing linguistic human rights (LHRs)...means the right to learn the mother tongue, orally and in writing, including at least basic education through the medium of the mother tongue, and to use it in many official contexts. It also means the right to learn at least one of the official languages in the country of residence (Skutnabb-Kangas, 1994, p. 625).*

In 1996, a group of Catalans and members of the International PEN club presented UNESCO with a draft Universal Declaration of Linguistic Rights. Such a document would grant linguistic rights to individuals, language groups and language communities. However, for most African, Asian, and Latin American countries, the rights in the Declaration are practically, economically, and politically impossible to realize, so it seems unlikely that it will be accepted in its present form. Nevertheless, it is the first attempt at formulating language rights at a universal level (Skutnabb-Kangas, 2000).

There is another aspect to the movement for linguistic human rights: the ecological aspect. Broadly speaking, where linguistic and cultural diversity is high, biodiversity is high as well. PROEIB Andes (2001a) cites a World Wildlife Fund (WWF) study that found that the 225 regions of maximum biologic importance in the world were inhabited by 67 percent (4,635) of the world's ethnolinguistic groups. Skutnabb-Kangas (2000, p. 88) cites the work of conservationist David Harmon, who compared lists of the 25 countries with the most country-specific higher vertebrates and the 25 countries with the most country-specific languages. Sixteen countries appear on both lists, a concurrence of 64 percent.

Linguists report that the world's languages are disappearing faster now than at any time in history. Biodiversity is disappearing as well. Given the geographic correlation between biodiversity and cultural and linguistic diversity, is there a causal relationship between the disappearance of species and the loss of languages? The WWF study implies one, suggesting that when languages die, they take with them the knowledge of generations about caring for the land and its plants and animals. Skutnabb-Kangas notes that the United Nations Environmental Program (UNEP) has acknowledged the connection between biological resources and human resources; she recommends that serious consideration be given to the study of possible causal relationships.

Preserving biodiversity thus may be another reason for preserving languages. Many believe that this can be done through formal education in the mother tongue.

II. Using Mother Tongues In The Classroom: Foundational Work

In this section we discuss the foundational work necessary to help children learn through their mother tongue. We begin with some thoughts on first steps: how language policy changes, and how language is developed for schooling, including some matters which must be addressed before formal education can begin in the language. We then discuss the actions which directly affect the child in the classroom: curriculum and materials, teacher training and recruitment, teaching methodology, and research and evaluation.

First Steps

The Beginning

How do innovative mother tongue programs or bilingual language programs begin? They can emerge from three directions: the top, the bottom, or the side. These categories are convenient for presentation, but in fact, the sources of any given program are usually mixed.

Changes from the Top

Eritrea, Ethiopia, Namibia and Vietnam are examples of governments that made the political decision to change their language education policy and practice. Eritrea and Ethiopia decided to open up the education process so that all children would have the opportunity to learn. They were reacting to previous governments which had made Amharic the sole language for primary instruction, despite the fact that in Ethiopia only about a third of the population spoke Amharic natively, and in Eritrea (then a part of Ethiopia) no one spoke it as a mother tongue. Deeply committed to education in the mother tongue, Eritrea is offering education in eight of its nine languages (the ninth has not yet been written). Ethiopia is now offering initial education in 15 to 18 of its approximately 80 languages, and may continue to expand into more. Newly independent Namibia decided to address the inequities of apartheid by permitting the use of local languages in the early grades. In Vietnam, the government decided to offer the mother tongue as a subject to non-Vietnamese-speaking children, who represent approximately 10 percent of the population but over 50 percent of the children not enrolled in school.

Changes from the Bottom

These changes come about usually with assistance from non-governmental organizations whose agendas include community development and improving literacy for underserved groups. Papua New Guinea, with its more than 800 languages, is the most prominent example of a country where changes have come about in this way. With help from over a hundred non-governmental organizations, such as the East Sepik Council of Women, the Goroka YWCA, the Lutheran Church, the PNG Trust, the United Church, and most notably SIL International, the villagers established Tok Ples Priskuls (preschools for children in the village language). Now, with the Education Reform of 1995, the government has made these preschools into part of the formal education structure. It has established a village-based community school in the local language (Pre-primary, Grades 1 and 2), followed by a primary school in English (Grades 3 through 8).

Changes from the Side

These changes represent actions by donor organizations who work with governments to address specific problems. Bolivia, Guatemala, and Mali are examples of this type of development. In Bolivia, UNICEF, with funding from Swedish International Development Assistance, established a pilot project, the Intercultural Bilingual Education Project. That project was the precursor of the educational reform of 1994, with its emphasis on bilingual and intercultural education for Spanish speakers and speakers of the most prominent indigenous languages (Quechua, Aymara, and Guaraní) as well as some of the smaller language groups.

In Guatemala, the pilot project for the bilingual education program began at a time of severe civil strife between the Guatemalan Army (mainly composed of native speakers of Spanish) and the disadvantaged descendants of the indigenous Mayans. In a situation that was troubled and violent, U.S. A.I.D. took the lead in developing a pilot project in education in four Mayan languages and in Spanish. This program has now grown into a national program covering 14 languages at last count.

In Mali, Save the Children, with funding largely from U.S. A.I.D., developed a community school program that offered education in the early grades in Bambara, a language spoken by about 40 percent of the population. An earlier program called convergent pedagogy (*méthode convergente*) helped pave the way for the mother tongue community school program. Developed by a Belgian linguist in the 1980s for use in the Bambara-speaking areas, the program has remained popular in many of the schools, especially since the mid-1990s when the Minister of Education initiated a reform giving priority to bilingual education throughout the country.

The PROPELCA program in Cameroon and the Northern Project Experiment in the Ivory Coast came from the side – from linguistic institutes, and others, at the national universities, as well as from community demand. SIL International was heavily involved at the start of these programs.

Motives

What are the motives for these changes? They are mixed, of course, relating to education, communication, and heritage. Eritrea views the use of mother tongues in education as a way of increasing educational opportunity and of asserting national identity through "Unity in Diversity." Villagers in Papua New Guinea view the use of their languages in schools as a way of preserving the languages and the culture they represent, and as a way of not losing their children to life in the cities. Frank Fairchild, the U.S. A.I.D. officer, now deceased, who had been most instrumental in piloting and supporting the bilingual education program in Guatemala, told a member of our team that his research had convinced him that the army in Guatemala was instrumental in convincing the government of Guatemala of the value of bilingual education. Soldiers trying to pacify villages during the civil war years had not been able to communicate with the Mayan-language speakers in the villages. In ways that we cannot reconstruct now, the soldiers' difficulties in communicating helped lay the foundation for using the local languages in schools (Fairchild, personal communication, 1987).

Language Development and Language Planning

Language development and language planning are activities that we take for granted in the largely English-speaking United States. Even in bilingual education programs, the languages involved are usually well developed. There is a standard script for writing, which in the case of English is the Roman script. There is a written form with standardized spellings for all words. With minor variations, the vocabulary is standardized, as is the grammar. Above all, there is a wide range of material available to read once one has learned the skill of reading. (To be accurate, it must be noted that there are many languages spoken by immigrants and indigenous peoples in the United States for which this high degree of language development is not the case. Unfortunately, many of the children from these language groups do not have access to any form of mother tongue instruction.)

In many parts of the world, educators interested in teaching children in their mother tongue cannot take these elements of language development for granted. Many of the languages are only oral and have not as yet been written. Communities that speak varieties of the language may not agree on which variety is best suited for education. Many words that would be necessary for use in school do not exist because they have hitherto not been needed. Therefore, some form of language planning must take place before schooling can begin.

What is language planning? Sociolinguists usually divide language planning into two types: *status planning* and *corpus planning*. Status planning refers to policy – deciding which languages or variants to declare official or develop. Corpus planning has to do with what we often call language development – a writing system, a dictionary, standardization, new vocabulary, conventions on punctuation, incorporation of loan words, etc. Robert L. Cooper has added a third type, acquisition planning, which sets up methods and incentives for acquiring the desired language (Cooper, 1989).

Language planning applies to the adaptation of a language to new purposes or tasks and does not imply that a given language is inadequate or impoverished for normal communication or expressive purposes. In training literacy workers, Stephen L. Walter divides the language planning process into five steps:

1. selection of language or dialect;
2. acquisition of basic knowledge about the language and how it works;
3. codification or devising a writing code;
4. standardization; and
5. elaboration or creating new vocabulary for new needs.
(Walter, personal communication, 1998; Walter, Davis, & Morren, 1999)

Selection occurs when authorities agree to use a language for a particular purpose, in this case education, and the communities understand and agree. The role of the communities is key. Selection of a language and a variety of that language must be consistent with the attitudes, beliefs, and values of community members. Often, community members do not agree with decisions made by the authorities, especially if they have had little input into those decisions. For instance, in Eritrea many schools are opting for initial education in Arabic, which is not the children's mother tongue, despite the government's encouragement to use the mother tongue. This decision is apparently influenced by the Muslim religion of the communities, the stays of many families in refugee camps in neighboring Sudan, the children's attendance in Koranic schools, and the perceived utility of Arabic socially and economically. In Namibia, several communities initially did not want to accept education in the local language instead of in English. It reminded them of their experiences during apartheid when they were denied the opportunity to learn in the language of wider communication (at that time Afrikaans).

Acquisition of basic knowledge about the language is essential. This involves knowledge of how the language works, including the mechanics of meaningful sounds (phonology), meaningful word parts (morphology), and rules of word combination (syntax). Before literacy work could begin with the oral languages of Indonesia, Papua New Guinea, or the Philippines, trained linguists working with native speakers of the language had to first learn and analyze the languages.

Codification can take place only after linguists have acquired basic knowledge about the language. They can then decide how the oral words and grammar are best represented in writing. This process used to take years. Now specialists from SIL International, working with at least five members of each local language group, can make the transition to writing within several months, provided they are working with languages close to others they already know. The call this process Informal Language Development. The result is an orthography that is suitable for beginning to develop written materials for education. Problems remain, but they can be addressed later (Walter, personal communication, 1998).

Codification also concerns the selection of the writing system. This may be one of the fundamental issues for learning several languages in schools. Students in Eritrea must learn three different alphabets: for Tigrigna, the alphabet called Fidel; for Arabic, the Arabic alphabet script; and for English, the Roman alphabet. In Vietnam, Vietnamese, spoken by about 83 percent of the people, uses the Roman alphabet, while Khmer uses a script derived from a South Indian alphabet (UNICEF, 1999a).

Standardization refers to the process of "acceptance within a community of users of a formal set of norms defining correct usage" (Stewart, 1968, quoted in Walter, Davis, & Morren, 1999). It often means the development of a written form that can represent as many dialects as possible and that is acceptable to a wide range of native speakers. In Bolivia, linguists were able to utilize decades of research on varieties of Quechua, spoken in Bolivia, Ecuador and Peru, and Aymara, spoken in Bolivia and Peru. Still, because of the varieties of the languages, especially Quechua, there remained dialect differences to resolve when writing learning materials. Research and development of Guaraní, spoken widely in Paraguay and to a much lesser extent in Bolivia, has been much less extensive. However, Guaraní speakers have approached the problem with resolve, deciding among themselves which form they believed should be used (Hornberger & López, 1998).

Standardization also refers to spelling. In Guatemala, mid-course in the development of school materials, Mayan linguists asserted their right to make decisions about the writing of their language. As a result, they changed the spellings of certain words rather than using the standard conventions of the Spanish alphabet.

An ambitious project in language development is the BASAL project (Basic Standardization of All African Languages). Under the leadership of Maurice Tadadjeu and other linguists in Cameroon, this Africa-wide project aims to provide a minimal development of all unwritten African languages within the next 15 years so that those languages can be used for initial literacy within their respective communities.

The task of language standardization can become thoroughly entangled with ideological and cultural conflicts, citing as examples Quechua varieties in Peru, the Mayan languages in Guatemala, Urdu in Pakistan and Hindi in India, Zapotec varieties in Mexico, and Jing Po in China (Walter, personal communication, 2001).

Elaboration is the creation of a broader vocabulary, and can be accomplished by coining new words, adding new words, expanding the definitions of old words, or borrowing words from other languages. Elaboration is an ongoing process in all languages, but for many countries it is a complex and ultimately political one. As countries extend language use beyond traditional domains, they must make social and political choices: Do they spend resources elaborating the traditional language, or use the already available words in the language of wider communication? How much effort should go into the elaboration of traditional languages as opposed to regional or national languages? Many countries must address these issues sooner or later in the course of language development.

To a certain extent the five steps of language planning are sequential, but linguists, educators, community members, and native speakers revisit them often as they work with new programs. However, before a mother tongue education program can begin, work must be well underway on the first three steps of the process – selection, acquisition of basic knowledge about the language, and codification.

Throughout the language planning and implementation process, it is important periodically to assess the state of knowledge and attitudes about language matters. A study conducted for Ghana under the auspices of U.S. A.I.D.'s Improving Educational Quality Project illustrates the importance of such assessment. Ghana's school language policy is to use the predominant local language of an area in the first three years of primary school. The purpose of the study was to describe the range of ways in which this policy was being implemented in the schools and to explore why it was being implemented in those ways. The evaluators found that in fact the school language policy was usually not being implemented at all. Reasons were lack of knowledge, lack of parental or teacher acceptance, and lack of materials. An important finding if Ghana is serious about mother tongue education! (U.S. A.I.D./Ghana, 2000).

The Classroom

We now move closer to the child as we look at what works in terms of the classroom: the materials, teachers, methodology, and evaluation of mother tongue and bilingual education.

Curriculum and Materials

When mother tongue programs begin, the curriculum and materials are often translations of the official materials, sometimes with some adjustments to reflect the community. In some programs, however, the teachers do not just translate materials, but work closely with members of the community to modify the curriculum to represent the culture of the community. This latter method ensures that the community will find the material authentic and useful. Sometimes this process goes further, and oral history is preserved because local stories, legends, songs, poems, and lore become part of the formal curriculum. These materials resonate with the life experiences of children and their parents.

In Bolivia, the national bilingual education program at first used materials developed in a similar program, the experimental bilingual education program that was developed in Puno, Peru in the 1980s with financial and technical assistance from the German Technical Assistance Agency (GTZ). These materials were in Quechua and Aymara. Later, with World Bank assistance, the government produced its own books in Quechua, Aymara, and Guaraní.

In Eritrea, in 1996 the only materials available were translations of Tigrigna materials, many done in the field during the war for independence from Ethiopia.

In Ethiopia, the government's decision to allow only four months to produce materials necessitated the use of translators to produce texts based on the Amharic syllabus for the first eight languages. Later a more relaxed schedule permitted the development of original materials based on a new primary curriculum.

In Guatemala, small teams of curriculum specialists and linguists labored for several years to write the first textbooks in the four major languages of the bilingual education pilot project.

In Indonesia, by means of the Biliteracy Through Literature program, adult villagers produce bilingual (local language and Indonesian) literature. With financial assistance from SIL International, several villages have now built and stocked their own libraries. Unlike most of the programs discussed in this paper, the focus of this project was primarily adult readers, not children in schools.

In the Mali community schools, the curriculum was condensed and adjusted to reflect rural life. In the Mali convergent pedagogy schools, textbooks that were simple translations from French to the local language were too easy for the children, so the content had to be enriched to provide material that would be appropriately challenging for them.

In Namibia, for the U.S. A.I.D.-supported Basic Educational Strengthening Project (BES), the original plan was to release teachers from school so that they could write new materials in the languages under consideration. This proved unworkable given the short time frame, so the technical assistance group hired translators who managed to produce four texts each in three languages for Grades 1 through 3. The Namibia BES teaching materials are called Systematically Designed Structured Instructional Materials or SIMS. Translated from English, they are highly scripted, self-contained posters. They have been very popular with teachers, but less popular with education authorities, who consider them an interim remedial program until other materials can be developed.

In Papua New Guinea, language workers and community people have worked together to produce materials based on village life. They have used the shell book method to produce the so-called Big Book, which the teacher uses with the whole group, and smaller pupil-size books. Devised by SIL International and local people, the shell book method is an ingenious way of producing inexpensive textbooks suitable for many languages. A shell book is a template of a book with pictures and no text (there is an accompanying book with the same pictures and the story in English). With copies of that template, the provincial educators working with SIL or other NGOs write a simple story in their language. The province then reproduces the stories for school use. In the past, with the help of the SIL technical assistance team, villagers reproduced the new text using a simple silk-screen device. Now, these materials can be produced using desk-top publishing technology and inexpensive reproduction techniques.

Are the materials mentioned above suitable? Most program reports do not analyze materials from an educational point of view. Rather, such reports emphasize costs, with a fleeting glance at age level appropriateness and ease of use. In the official bilingual education program in Guatemala, the first materials were expensive hardbound textbooks in four colors. Evaluations deemed them too difficult for children, and plans are underway to make them more appropriate for class use. In the Mali convergent pedagogy schools, textbooks translated into children's local language were not sufficiently challenging and had to be enriched.

Teacher Recruitment, Training, and Professional Development

The success of mother tongue education programs depends crucially on the recruitment of teachers who speak the language of the community and are comfortable using that language in an academic setting.

There are three kinds of training for such teachers: pre-service, in-service, and outside study to upgrade teacher credentials.

Pre-service training takes place before teachers begin work in the classroom. In Bolivia, bilingual teachers and supervisors receive pre-service training at the Normal Schools, some of which are being converted into higher level institutions, two geared to Aymara, two to Quechua, one to Guaraní, and one to the minority linguistic groups. In addition, two of the largest national universities have opened programs to train bilingual educators. In Eritrea there has been a shortage of teachers prepared to teach in several of the languages. To address this problem, the Teacher Training Institute in Asmara, the capital, which is the only teacher training school in the country, plans to recruit students from all language groups.

In-service training has been used in Guatemala (especially in the beginning years), Mali, and Papua New Guinea. Education authorities recruit teachers who are speakers of the local language. In the case of the community schools of Mali and the new elementary schools of Papua New Guinea, the community chooses villagers who are respected leaders and have some education (in Papua New Guinea at least through the 10th grade). The program offers in-service training in the use of their language for initial reading and literacy instruction, helping them become comfortable using the local language in an academic setting.

In Mali, the community school teachers receive intensive help from pedagogic advisors contracted by Save the Children, the non-governmental organization responsible for technical assistance. In Papua New Guinea, the Tok Ples Priskul teachers and the teachers in the new elementary schools of the Education Reform are trained and helped by members from the non-governmental organization assisting the school. This training is gradually being given by the government, as part of the government-supported Preparation Year of the new elementary schools.

Another form of in-service training is the approach called "Quality Circles" used in Guatemala in the Intercultural Bilingual Education Program as well as in the New Unitary Schools (multigrade schools). Instead of the top-down training of the usual in-service program, quality circles consist of teachers from neighboring schools meeting frequently to discuss their problems and help one another find solutions. Teachers have reported that they benefit greatly from this method of teaching one another.

In the Guatemalan program, many teachers and supervisors began working in the bilingual education program as paraprofessionals or "promoters." Taking advantage of special university upgrading courses, they have become certified as full professionals within the Ministry of Education structure, gaining prestige as well as a higher salary. Papua New Guinea has recently begun such a program as well. In a similar program in the United States, bilinguals often work as paraprofessionals because they lack a college degree or they do not have the credentials needed to be employed as teachers. Some school districts and institutions of higher education offer a "career ladder" program in which bilingual paraprofessionals receive training and experience that they can apply toward a teaching certificate.

An advantage of this system for poor countries is that paraprofessionals can be paid less until or unless they become certified as teachers. Since many of these paraprofessionals do not have alternative sources of income, they are happy with this arrangement for a while at least. The opportunity cost for them is zero or low.

When programs are small, teacher recruitment and placement present few difficulties. Problems arise when programs expand and additional teachers are needed, or when teachers leave for better-paying jobs in larger towns and villages, and additional teachers must be recruited and trained. For example, in Guatemala, until very recently the national data base listing the languages spoken by teachers contained no information. As a result, many teachers who did not know the language of the children they were to teach were placed in the bilingual education program. There is now information in the data base, and it is expected that better teacher placement will result.

Methodology

UNICEF's *State of the World's Children 1999* states that "the Convention on the Rights of the Child guides us toward a more child-centered model of teaching and learning, one in which students participate actively, thinking and solving problems for themselves, and in this way developing the self-esteem that is essential for learning and decision-making throughout life." Thomas and Collier (1997) refer to this kind of teaching and learning when they write of the use of current approaches to teaching the academic curriculum through two languages. Of course, participating actively would be very difficult if children did not understand and speak the language being used in the classroom.

How close do the programs we have been examining come to this goal? It is difficult to know. The reports on the programs usually do not refer to methodology in the classroom. We have observed classes in only four of the programs reviewed: the National Program for Bilingual Intercultural Education (1983) and the New Unitary School program (1996) in Guatemala, the mother tongue programs (1996) in Eritrea, and *méthode convergente* classes in Mali. Classes in two of these programs approached the UNICEF ideal: the New Unitary School (*Nueva Escuela Unitaria* or NEU) program in Guatemala and the *méthode convergente* classes in Mali.

The NEU approach borrows many ideas from the *Escuela Nueva* methodology of primary schools in Colombia. There, the teacher is a resource, not the single source of knowledge, and children work independently in groups. In the NEU schools we found busy classrooms, with students in groups of three or four working on their own from self-instructional guidebooks. The teacher was checking the work of one group in a corner. Educational materials and student work were displayed around the room. There was a library corner with books the students could read, as well as a science and social studies corner. Several parents were outside preparing the children's mid-morning snack.

By contrast, in the National Bilingual Intercultural Program, called the Bilingual Education Project at that time, teaching was more traditional, with the teachers, dressed in the Mayan clothing of the region, delivering lessons to attentive students. In 1996, when we discussed the contrast in methodology between the bilingual classes which used traditional teacher-oriented methodology and the new multigrade schools, the Vice Rector of Landivar University, a linguist who has been involved with Mayan education for over 20 years, replied that the bilingual program had focused on linguistic issues and issues of language validation, and that now it was time to pay attention to teaching methods. In 2001, class observations in El Quiche confirmed the persistence of traditional teaching methodology, even when classes were conducted in the children's first language (Rubio, personal communication, 2001).

In Mali, teachers in classrooms where Bambara was the medium of instruction were using the *méthode convergente*, the bilingual education program begun in the 1980s and strongly supported by the Minister of Education. We found lively groups of students. Although there were no textbooks, in one classroom the walls were filled with large sheets of writing in Bambara and the children were working in small groups. In another school about 50 students were outside taking turns acting out a folk tale. The lively involvement of the students in the Bambara schools contrasted sharply with the silence in classes we observed which used the traditional all-French approach. There, one child worked at the blackboard with the teacher while the other students passively watched.

In Eritrea, however, in mother tongue classes we found teachers helping one child write a word on the blackboard while the other pupils watched. We saw teachers reading a line of text and the pupils repeating that afterwards. The methodology was the same in the mother tongue, the language that the students understood, as it would have been in a foreign language. The teachers were not exploiting the fact that they and the children had a language in common to employ more student-centered teaching strategies.

A further example comes from a program we did not observe. In Papua New Guinea, teachers are successfully using an eclectic literacy approach called *Interactive Whole Language*. When children encounter a story, they learn its meaning first, before sounding out letters, syllables, words or sentences. Subsequently, they learn phonics and word attack skills from the words in the whole story. It is a child-centered approach with the teacher setting the stage for the children's activities (Ruth Ray, personal communication, 2001).

Based on this small sample and on visits to schools in other countries, we believe that teaching-learning methodology is one area where there is still much to be done. Teaching in a language the child understands is a necessary step toward quality education, but it is not sufficient. It is important to emphasize the use of active methods of teaching and learning, with ample opportunities for children to interact with one another and to think critically for themselves. These active methods are important if the child is going to acquire the skills, attitudes and values that form the foundation for participation in a democratic society and life as an entrepreneur and an active economic producer.

Research and Evaluation

Funding agencies are usually responsible for whatever research and evaluation occur in connection with these programs. Evaluations are tied to the funding cycle and aim to show whether the programs lived up to expectations before the next funding cycle begins. Much useful work has resulted, often in collaboration with the education research groups within each country. Economists have used efficiency statistics (repetition and dropout rates) to discuss the cost-benefit ratios for bilingual education. Educators have examined student achievement; student, parent and community attitudes; efficiency statistics; and ways of improving program delivery. Some highlights of these evaluations follow.

Achievement and Attitudes

In Ethiopia, an early evaluation (perhaps too early) after just one year of implementation revealed that although parent, student, and teacher attitudes were positive toward the use of indigenous languages in the classrooms, the students themselves performed below the national averages. Reasons given were the shortage of qualified teachers and materials and the linguistically mixed classrooms, problems confounded by the decision to implement new materials quickly in all six grades. In 1999 the Ministry of Education, with technical assistance from the Academy for Educational Development under U.S. A.I.D. funding, began an assessment of the impact of the multilingual features on learning outcomes, aiming to make test scores comparable across the ten languages used in the region.

Achievement, Attitudes and Efficiency

In Mali, the convergent pedagogy students finish primary school cycle in greater numbers than traditional students, and their pass rates on the primary school leaving exam (in French) are significantly higher than those of traditional students. In addition, Ministry studies have found that convergent pedagogy students have an increased interest in learning, are more intuitive and creative, and take risks more readily. Attitudes have carried over to the home and the secondary school. At home they ask more questions and offer to help more with chores. In secondary school the former convergent methodology students are more advanced and assertive than their traditional counterparts (Bender, 2001).

In Papua New Guinea, early studies by evaluators from the University of Papua New Guinea and the North Solomons University Center of the vernacular preschool village programs in the North Solomons province found that

> *children who attended the Tok Ples preschools (preschools which use the "talk of the place" or vernacular) enjoyed a distinct educational advantage in terms of readiness for the formal school system both socially and academically. They had made significant gains in literacy skills and those skills were being transferred to reading and writing instruction in English and Tok Pisin (a Melanesian pidgin widely used as a lingua franca in PNG). The programs were enjoying strong community support and were enhancing the quality of life in rural communities (Ahai & Bopp, 1993).*

Another study in three other provinces found that retention rates for children who had attended the Tok Ples preschools were significantly higher than the national average. In 1995, in a paper presented to staff at the World Bank, Susan Malone, of SIL International, stated,

> *Although no comprehensive evaluation of the impact of the mother tongue effort on either children or adults has yet been conducted, the effort can be judged successful because it has continued to expand and has given rise to the government's decision to restructure the entire education system to include, for the first time ever, a three-year mother tongue component (Malone, 1995).*

Between 1995 and 1999 David Klaus, former education task manager at the World Bank for Papua New Guinea, visited many schools in at least ten of the country's 20 provinces. He writes,

> *Although to my knowledge no longitudinal studies have been done, there is an overwhelming amount of anecdotal evidence that children become literate more quickly and easily in their mother tongues than they did in English. They also appear to learn English more quickly and easily than their older brothers and sisters did under the old system....By the end of 1998, the results of Grade 6 examinations in the three provinces which began reform first in 1993 were much higher than results of students from provinces where they were immersed in English from Day One of Grade One (Klaus, 2001).*

Achievement and Efficiency

Guatemalan evaluators have looked at the official bilingual education program at key points in its development. When the Ministry of Education was deciding on the feasibility of moving from the pilot stage to an expansion, comparisons were made between the achievement of pupils learning first through Mayan and then in Spanish and that of similar children learning only through Spanish. The bilingually-instructed children achieved higher scores in the tested subjects, including Spanish, although their exposure to Spanish was much less than in the traditional Spanish-only classrooms. Recent evaluations of the expanded program have found that the gains of the bilingually-educated children continue to hold, but only when the program is well implemented. When the teacher speaks and uses the language of the children, has received training in bilingual teaching methodologies, and has adequate materials, the children outperform their counterparts in both mathematics and Spanish. Overall, including the many schools where the program is not well implemented, there is no particular advantage to the so-called bilingual schools. However, in one department, El Quiche, more students in the bilingual program than students in the traditional all-Spanish program completed Grade 6, even though the bilingual program was unevenly implemented (Chesterfield & Rubio, 1997; Enge & Chesterfield, 1996).

Achievement and Problems with Program Change

In Mali, a 1996 evaluation of the Save the Children community schools revealed that students in Grades 1 through 3 had attained better literacy skills in Bambara than their peers in government-run schools had attained in French, and had done as well as those peers on tests of arithmetic. Reasons given were smaller class size, more appropriate curriculum, greater availability of instructional materials, and intensive pedagogical support, as well as maternal language instruction. At the time of this evaluation, several problems were foreseen; for instance, the low mastery of French on the part of the village teachers might make it difficult to bring students' French ability to a suitable level if the students were to continue the six-year primary cycle in French (Muskin, 1997).

The original plan for the community schools was to give three or four years of schooling in Bambara only. After that, the students would become farmers, without going on to further education and without having to learn French. However, parents and others wanted the graduates of the community schools to continue for three more years, to the end of the primary cycle. The medium of instruction for those three years would be French. According to Fred Wood, Director for Education of Save the Children, it was initially difficult to blend the local language community school with the normative, examination-based French-medium schools. At first, students tested at the end of four years in Bambara did well, but students tested at the end of the last primary year in French did poorly. Test results have subsequently improved. In 1999, only 10 percent passed; in 2001, over 30 percent passed these examinations in French (Wood, personal communication, 2001).

Cost-Benefit Studies

The World Bank has produced an interesting study which analyzes cost-benefit ratios of bilingual education. Harry Patrinos and Eduardo Velez Bustillo compared the repetition and dropout rates for Mayan Indian students in the bilingual program and similar Mayan Indian students in the all-Spanish program, using 1991 Ministry data:

	Bilingual Students	Traditional Students
Repetition Rate	0.25	0.47
Dropout Rate	0.13	0.16

They concluded that bilingual education in Guatemala is an efficient public investment. A shift to bilingual schooling would result in considerable cost savings as a result of the reduced repetition, saving the government over 31 million quetzales (US$5 million), which equals the cost of providing primary education to about 100,000 students per year. Bilingual education is also an efficient private investment. Students in Guatemala must provide many of their own school supplies, and each additional year of education means an additional 186 quetzales a year in income (Patrinos & Velez, 1996).

Cost Effectiveness

In the final year of the Basic Education Strengthening (BEST) project in Guatemala, evaluators looked at two innovative programs supported in part by the project: the multigrade classroom pilot (Nueva Escuela Unitaria or NEU) and the bilingual education program (DIGEBI).

The indicators of cost-effectiveness were the percentage of children in the base year (1991) who progressed normally through primary education (six grades in six years) and the average cost per student to produce a sixth-grade graduate in 1996. The cumulative costs per student for all years were divided by the number of students in sixth grade in 1996. These costs were compared to those for a population of children in similar rural schools operating in the same departments as the two programs.

The two programs were both more efficient (more students progressed at a normal rate through the school) and more cost effective than similar schools without the innovative programs. The greater efficiency of the innovative programs resulted in a lower per-student cost for each child who made normal progress to sixth grade. This occurred despite the additional operating costs for the innovative programs (Chesterfield & Rubio, 1997).

Recommendations for Program Changes

In Vietnam, the 1998 UNICEF evaluation of the bilingual education component that had been added to a multigrade project recommended continuing the development of supplementary materials in minority languages, involving the community in developing the content of the books, giving high priority to the training of ethnic minority speaking teachers, and piloting the use of an ethnic minority language as the initial medium of instruction. Prior to that evaluation, the schools had followed the government policy for ethnic minority language teaching, which was to teach the written language as a subject, rather than using it as a medium for instruction at the onset of school.

The evaluation stated that, "The way bilingual education is presently implemented in Vietnam goes against the bulk of research in education. Research around the world has shown that literacy skills are best acquired in the mother tongue and then transferred to the second language, resulting in increased proficiency in both languages" (UNICEF/Vietnam, 1998).

III. Using Mother Tongues In The Classroom: The External Support Needed

In this section we discuss the types of external support that can help children learn within the classroom. First, we discuss the sociocultural environment in terms of activities at three levels: national government, Ministry of Education, and community. We have used this top down order because it is conventional, not because it represents an order of importance. Indeed, if we were to list the activities in priority order, we would begin with the community, for community support is key to all successful education programs.

Second, we discuss the role of outside agencies and regional networks. Finally, we discuss ongoing program development, including taking successful pilots to national scale.

Levels of Support

National Government

National level political will and legislative support are important at all phases of program development. They are especially important for the expansion and sustainability of innovative programs.

Most of the countries we have reviewed have passed laws legalizing some form of education in the local languages. In Bolivia, the National Education Reform of 1994 made bilingual and intercultural education a priority, beginning with teaching in three major indigenous languages, Quechua, Aymara and Guaraní, and later incorporating the other minority languages. In Eritrea, the government has established a mother tongue policy for the language of instruction at the primary level, giving local communities the option of using the mother tongue or another language, namely Tigrigna or Arabic. In Ethiopia, the Education Reform of 1992 has promoted a similar policy, with priority given to the use of the major regional languages.

The Guatemala Peace Accords of 1996, which ended 30 years of civil war, stated that the government would promote the use of all indigenous languages in the educational system in order to enable children to read and write in their own language or in the language more commonly spoken in their community, and would promote bilingual and intercultural education. Namibia, upon independence in 1990, decreed that all persons would have the right to education, irrespective of their ethnic background. The government has been systematically instituting a mother tongue policy as a way of overcoming the inequities of the apartheid years.

In Papua New Guinea, the Elementary and Primary Education Reform of 1995 authorized the gradual restructuring of formal education, with village-based schools for the first three years in the local language and bridging to English for the later grades. This reform and its implementation is nothing less than miraculous, given the fact that to fully implement the policy would require education in over 800 languages! Doubtful readers should note that village schools in about 400 languages are now in operation, although it is fair to point out that supervision and monitoring of many of these programs is still inadequate (Walter, personal communication, 2001).

The Philippines has permitted, legally, the transitional use of local languages in the early grades since it instituted its bilingual education policy in 1974. This policy decrees that English will be the language of instruction for science and mathematics, and Filipino for everything else. Filipino is an enhancement of Tagalog, one of the three main languages in the country and the language in the area of the capital, Manila. However, the Ministry has seldom given strong support to programs in local languages.

In the early 1990s, Vietnam promulgated the decision by the Government Council that in areas with ethnic minority groups, ethnic minority languages and writing should be taught together with the national language (Vietnamese) in primary and continuing education. Implementation of this decision has resulted in the ethnic minority languages, when used, being used as a subject in the curriculum, *not as the medium of instruction.*

It is interesting to note by comparison that the United States has no explicitly formalized language policy. Aspects of language policy and planning are, however, expressed through various legislative, judicial, and regulatory decisions, especially in education (Christian, 1999). This "implicit" language policy recognizes the necessity of proficiency in English as the language of wider communication in society. Use of other languages in education is allowed, but not required. Specific requirements related to education are primarily in the hands of individual states and local agencies, and these jurisdictions vary widely in their policies on the education of students from non-English-language backgrounds. Some states, such as California, prohibit the use of mother tongue except in specific circumstances, while others require education in a child's native language for some period of time if sufficient numbers of children share that language. The national government policy does require attention to language issues in providing equal educational opportunity (based on decisions rendered by the courts), but it does not require mother tongue education as an approach.

Ministry of Education

Support from all levels of the Ministry is important to the continuing success of local language programs. In Guatemala in the 1980s, during the pilot phase of the bilingual program when only 40 schools were involved in bilingual education, the then Minister of Education gave full support to the program. She regularly appeared in the local newspapers wearing Mayan dress and championing the innovative schools. Subsequent Ministers of Education have given the program less visible support, even as the program has expanded and gained legal authority. In 1995 the bilingual education program became the General Directorate for Bilingual and Intercultural Education.

In Mali, the Minister of Education is supportive of mother tongue education, especially if it serves as a bridge to French, the country's official language and still the official language of instruction. In the Philippines, the former Minister of Education, who has long been active in language matters, indicated that a higher level of political support for some of the many Philippine languages might be forthcoming. In July 1999 he announced an experimental program using two other major Philippine languages, Ilokano and Cebuano, as well as Tagalog, as official languages of instruction for Grade 1 pupils. The current status of these plans is unknown.

Community Involvement and Control

In many countries, schools began as local initiatives, often with NGO and mission support, and at some later point the national government took over the system. Now people realize that schools will not work well without community involvement and support. Experience has shown that children enroll, stay in school longer and learn more when they are strongly encouraged by parents who have a stake in the school. When that schooling takes place in the language of the local community, parents can communicate and interact freely with their children's teachers. This cannot happen if the teachers speak the national language but not the local language.

However, programs that use local languages must take into account parental viewpoints, and parents may not want their children instructed in their own languages. We have frequently encountered cries such as, "Why would I send my child to learn Quechua? He already knows Quechua. He needs to learn Spanish to get a job." The sometimes impossible task is to persuade the parents that the child can learn about the world and learn the skills of reading and writing only if communication with the teacher takes place in a language that the child understands, and that a child who has a good basis in the local language will be able to learn the second language better and faster if given enough exposure to that language. This is a tough sell in situations where parents do not value their own language and do not understand the importance of the development of the first language to their child's cognitive development. As Luis Enrique López has recently written in terms of Latin America, "No native Spanish-speaking parent would ever object to the inclusion of a subject area devoted to the development of his children's first language." But in the settings we have been considering here, parents may perceive school as an institution which can open up the path for early acquisition of the dominant language and the social and economic advantages it can bring for their children. That this seldom occurs does not seem to dampen their faith (López, 2000, our elaboration).

In Bolivia, the Popular Participation Act of 1994 is promoting political decentralization and devolution of power, thus fostering organization of indigenous municipalities. In Guatemala, through the new National Community-managed Program for Education Development (PRONADE), the government is developing community-run schools as a way of encouraging parents to enroll their children and afterwards keep them in school. PRONADE parent committees are responsible for choosing teachers who know the language of the community, paying teacher salaries and buying some school supplies. In the New Unitary School program (NEU) in Guatemala, the emphasis has been on active learning within multigrade classrooms. This program relies heavily on community leadership and resources. Both Guatemalan programs have been highly successful, the first in increasing the numbers of children enrolled in school, and the second in increasing the amount of learning taking place in school as well as the numbers of children in attendance.

The village schools of Papua New Guinea, precursors of the elementary school reform, owe much of their success to the presence of strong community leaders. Much of the support has come from community members who see these schools as a way of preserving village life and customs. With the education reform of 1995, the government of Papua New Guinea began providing some financial help to the community programs. Assistance for the elementary schools (Kindergarten and Grades 1 and 2) is provided by AusAID, and the World Bank has been financing textbooks for Grades 1-6, including English books for those schools where the reform has not yet been introduced.

In the community schools of Mali, some of the funding comes from the central government, but a school management committee handles budgets, selects and pays teachers, oversees school operations, and monitors student enrollment and attendance. Parents and the community provide labor for school construction and maintenance and are responsible as well for tuition fees and some operating expenses.

Support from All Levels within the Country

In many cases, the three levels of support for educational policy outlined above occur separately. In Papua New Guinea, however, support has occurred at all three levels more or less simultaneously. For at least 25 years, individuals at all levels of society have carried on an ongoing dialogue to identify educational needs, outline potential avenues for cooperation, and identify and mobilize resources. Much of this dialogue was generated by the National Literacy and Awareness Programme (NLAP), established in 1989 to implement the Language and Literacy Policy and the Literacy and Awareness Programme, and the many non-governmental organizations assisting literacy at the village level.

Papua New Guinea's current success in its radically innovative language program is in part the result of this quarter century of discussion among all the stakeholders in the society. This presents an important model for other countries seeking to resolve their language "problems."

Ongoing Program Development – Going to Scale

Transforming a successful pilot project into a regional or national program is difficult. One reviewer of this report said that for him the most critical problem in the process is the lack of technical personnel to provide training and supervisory services as a program grows and expands. As a result of this lack, unqualified or hostile personnel are pressed into service and tend to undermine the innovation since they do not understand it themselves.

An evaluation of another kind of education innovation, Improving Girls' Education in Guatemala, discussed the problems of bringing successful pilot projects to a national scale.

> *Beginning a system innovation on a small scale is usually necessary, but donor-run pilot projects are usually costly and so isolated and insulated that they are seldom scaled up. Pilot projects generally should be run by governments with expansion plans built into the pilot, with support from donors where appropriate (U.S. A.I.D., 1999).*

This may be unrealistic, because most parties wait to see if the pilot works before they agree to scale up the innovation. However, in a perfect world the elements for successfully bringing small projects to scale would be in place, or measures would have been taken for their development. Phases of expansion would have been planned from the beginning, with the local authorities in charge. There would be a legal framework which would endure through changes of political administrations and would be accompanied by political will and support at all levels of government and citizenry. To ensure continual support, there would be regular publicity campaigns presenting the benefits of the education innovation, in this case the use of the local language as the first step of schooling. These social mobilization campaigns would be similar to advocacy and media campaigns implemented recently in such countries as Indonesia to keep children in school during the economic crisis and in the Philippines to develop support for Child Friendly Schools (UNICEF, email communication, 1999). The population and nutrition sectors have been using such campaigns as a critical part of the program for years.

In our perfect world, communities would be directly involved with their schools and would have a stake in their success. They would have seen the benefits of literacy in the community language first and in the language of wider communication later, and their fears that insufficient time was devoted to learning the national or official language would have been allayed.

Institutes for language development would be well established, either as part of the Ministry of Education or as free-standing organizations. Teachers' colleges and universities would offer courses in the local languages and in the methodologies of bilingual education, including approaches to teaching the national and official languages as a second or foreign language. A curriculum unit at the Ministry would include plans for preparing materials in all the languages used in the schools. Materials planning, preparation, production, and revision would be an accepted part of the Ministry's work, as would research and evaluation so that the program could be constantly improved. In decentralized countries, much of the curriculum work would be done at the state or provincial level, as is the case now in Papua New Guinea.

This is an ideal world that does not fit the severe resource constraints of developing countries. However, where programs have lasted they have included some of these elements. One example is Guatemala, which has had an official bilingual program for almost 20 years. Not all of the elements are in place, but one can find the legal framework, political support, much language development, an Association of Mayan Linguists as well as other Mayan groups, teacher training in the higher level institutions, continued development of materials, and some evaluation. Several of the universities offer courses and degrees in bilingual education.

Another example of going to national scale is the educational reform in the Philippines that has resulted in the present bilingual education program. At the time of independence from the United States in 1946, the practice was monolingual education in English, with a Tagalog-based national language taught as a subject. In 1950, Clifford Prator, a visiting Fulbright professor, investigated the language situation and recommended that the vernaculars be used for initial school, with English taught as a second language. From 1957 to 1974 a multilingual system of education prevailed. Anecdotal evidence of success for this approach was seen in the Iloilo and Rizal experiments. In the Iloilo experiment, Hiligaynon was the initial language of instruction. In the Rizal experiment, supported first by the Rockefeller Foundation and then by the Ford Foundation, English was delayed two years so that students could first achieve literacy in Tagalog and other home languages.

In 1974, without clear empirical evidence for the superiority of the vernacular approach, and with nationalist-oriented demands to extend the use of the national language in education, the authorities initiated the present bilingual education policy: mathematics and science in English and everything else in Filipino, the Tagalog-based national language. In 1985, a national task force organized by the Ministry of Education, Culture and Sports evaluated the implementation of the bilingual policy. Overall results were disappointing, except in high quality schools with well trained teachers and good materials. Many of these schools were in the urban area around Manila where there is a concentration of Tagalog speakers, one indication of the advantage for children of being educated in their home language. Now there appears to be some interest in early education through the mother tongue.

The outstanding example of ambitious plans for going to a national scale is the primary education reform in Papua New Guinea. About 20 years ago, the provincial authorities in the North Solomons introduced a village school, a Tok Ples Priskul, as a preschool using the local vernacular. It was a non-formal school for children in the village to attend for one or two years before entering the formal primary school, taught only in English. As a grassroots movement, the Viles Tok Ples Skuls, village schools in the local vernacular, spread throughout the country, so that in 1993 there were at least 3,500 local Tok Ples preschool classes. With the success of this movement, the advantages children from the preschools demonstrated in their later primary education, and the strong support in the villages, the Ministry of Education in 1995 authorized a reform of the primary education system to include three years of the village schools in the local vernacular with bridging to English, followed by five years in primary schools in English, often outside the children's home village.

All provinces have submitted their plans for the gradual implementation of the reform, and about 380 language groups now have village schools. The original idea was to start in 1995 and finish in 2004, but this date may slip due to the magnitude of the task.

Like Guatemala, Papua New Guinea has demonstrated many of the necessary elements for this scaling up process. A national level legal framework is in place, and each province has submitted plans for expansion. There is support at the national level, with the present Secretary of Education promoting the use of the vernacular within the country as well as outside it in meetings with colleagues in nearby multilingual countries, such as the Solomons and Vanuatu. Communities have been involved from the beginning in the creation of the schools, in selection of teachers, in language planning, and in writing materials.

The elements of success are there. We are convinced that if Papua New Guinea with its over 800 languages can begin formal education in the mother tongue, then other countries, with far fewer languages, can begin the process as well.

Role of Outside Agencies

Donor and other outside agencies often play a major role in bilingual or mother tongue programs, offering both money and technical assistance. Sometimes outsiders initiate the offers to help. This was the case in the initial stages of the bilingual education program in Guatemala, where U.S. A.I.D. education officers convinced both the Guatemalan authorities and their own agency to pilot a bilingual education project as an outgrowth of the government's pre-school monolingual *Castellanización* (Spanish instruction) program.

Sometimes initiatives for technical assistance come from both local communities and outside agencies. Examples include the primary education bridge programs and the adult literacy programs in the Philippines and the many local vernacular preschools in Papua New Guinea, where SIL International and other non-governmental organizations have served as advisers to small language communities.

Usually, however, the initiative comes from governments that request financial and technical assistance. Examples include the Bolivia Education Reform of 1994, with help from the World Bank and other organizations; Ethiopia, with financial and technical help from U.S. A.I.D.; Mali, with help from U.S. A.I.D. through Save the Children and others; Namibia, with help from U.S. A.I.D.; and Vietnam, with help from UNICEF, the World Bank, and others.

Given the assistance that many of the multilateral and bilateral governmental organizations have provided for mother tongue education, one might expect them to have a policy on language in the classroom. In general, however, they do not. Most international organizations, such as the World Bank and U.S. A.I.D., do not have a policy of promoting mother tongue education. In policy statements, these organizations stress the importance of improving access, equity, efficiency and quality, but they seldom highlight the important roles that language issues play in those four areas – getting more children in school, getting more girls and members of disadvantaged groups in school, keeping the children in school, and making sure that they can understand what they learn. The organizations respond to initiatives from the governments they are trying to help rather than confronting those governments with the importance of the appropriate language of instruction.

Written policy statements on language are difficult to find. We searched the recent education sector strategy of the World Bank and found only five short references to language among its 80 pages (World Bank, 1999). We did not find such an education policy document for U.S. A.I.D.

We asked other organizations about their policy toward the language of instruction. Frank Method, then director of the UNESCO office in Washington, replied that UNESCO advocated use of the mother tongue to the maximum extent possible, considering difficulties such as practical restrictions on which language could be used for education with refugee children and the problems with unwritten languages.

Elaine Furniss, senior education adviser for UNICEF New York, gave the most direct answer to our question.

> *UNICEF does not have a policy explicitly stated with regard to language of instruction. However, various documents make the following or a similar statement: Pupil achievement is enhanced if pupils first become literate in their mother tongue, but children must also gain access to the national language so that pathways for learning are not cut off. Textbooks and learning materials should be written in a language which both teachers and children can understand. Whatever the language policy, teaching must be effective for pupils to achieve (Furniss, personal communication, 2001).*

One bilateral organization which does have a clear language policy is the German Technical Cooperation Agency (GTZ). This organization is committed to encouraging mother tongue education, especially at the elementary school level. For more than 20 years it has assisted many such programs, especially in Latin America and in Africa.

However, despite the lack of explicit language policies, within many aid donor organizations there are individuals who are helping to raise the profile of language issues when education is discussed. In April 2000, an education specialist at the World Bank Institute organized a week-long distance education course on the Language of Instruction in Basic Education. Over 70 participants in six sites (Bolivia, Ethiopia, Ghana, Mexico, Paraguay, and Washington, DC) participated in presentations and discussions on the language of instruction, including the social and political dimensions, the economic aspects, the pedagogical issues, and the necessary conditions for successful implementation. Other World Bank officials, especially those working with Latin American countries, are strongly supportive of mother tongue education.

In contrast to the governmental organizations, a few non-governmental organizations do have a clear policy on language in education. Save the Children, an international private voluntary organization, promotes mother tongue instruction wherever it can, emphasizing mother tongue instruction for the early years and transfer to the language of wider communication once the basis for learning has taken place in the mother tongue (Wood, personal communication, 2000). SIL International works with language communities worldwide to facilitate language-based development through research, translation, and literacy. Usually working with small language groups whose people live on the fringes of national life, SIL International focuses on grass roots, community-based literacy programs that can enable local people to assume responsibility for sustainable programs in their own communities and languages (<http://www.sil.org>).

Other examples of non-governmental organizations with a clear language agenda are regional networks such as the African BASAL project (Basic Standardization of all African Languages) and the

South American PROEIB Andes (*El Programa de Formación en Educación Intercultural Bilingüe para los Países Andinos*). The BASAL project, under the leadership of the National Association of Cameroonian Language Committees (NACALCO), aims at providing basic development of all unwritten African languages so as to render them a practical medium of initial literacy. PROEIB Andes is a network of organizations in Argentina, Bolivia, Chile, Colombia, Ecuador and Peru which aims to consolidate intercultural bilingual education through training, research, and technical assistance.

IV. Opportunities For Assistance

We return to the central issue of this paper: the paradox revealed in the knowledge that children learn best in a language that they know and the reluctance of the international community and many countries to acknowledge this fact and follow up with policy and action.

We will look at the situation first on a global basis, and then on a country basis.

Global Leadership

The international community needs leadership on language matters.

Leaders are needed to take the responsibility for engaging donor organizations and country representatives in a dialogue on the importance of language to issues of access, efficiency, quality, and equity in education. At present, no one is taking this role. Even within the context of heightened commitment to primary education, no one is taking the leadership on issues related to the language of instruction.

At the last major conference, the World Education Forum in Dakar, Senegal in April 2000, delegates from over 180 countries adopted a framework for action that focused on the importance of girls' education, quality learning, and reaching those who continue to be excluded. As we discussed in Chapter I, there was no recognition of the use of the mother tongue issue as the key to improving access, efficiency, quality, and equity in education.

Candidates

In the past it was possible for one organization to take the lead alone, as the Ford Foundation did thirty years ago. As stated in the Ford Foundation report *Language Education in Developing Countries: The Changing Role of the Ford Foundation*, "Only UNESCO and the Summer Institute of Linguistics have had as varied and continuous an involvement as the Ford Foundation with the language problems of countries in Asia, the Middle East, Africa, and Latin America." During those years Ford Foundation activities included sponsoring international conferences, building local resource bases in universities and special institutes, conducting country-specific language surveys and language-related basic and applied research, educating local specialists, training teachers, and sponsoring changes in curricula and syllabi and the preparation and publication of textbooks and teachers' guides (Fox, 1974).

Now, however, leadership can come from one source but must involve the other key players – the UN agencies, the multilateral and bilateral donors, and the international and grassroots non-governmental organizations. Two current examples come to mind. The first is Oxfam International's Education Now campaign. Oxfam International is a network of 11 aid agencies whose purpose is the reduction of poverty in developing countries. Oxfam has not formerly worked in education, but it has learned from published research and experience in many countries that basic education helps to break the cycle of poverty. Therefore, Oxfam International has undertaken Education Now, a campaign that aims to establish a Global Action Plan for basic education by mobilizing financial resources and political will. Oxfam has been actively lobbying international and bilateral organizations to grant quicker and deeper debt relief for countries that are committed to investing in poverty-reduction measures, including education (Oxfam International, 1999).

Another example is the Soros Foundation, a network of autonomous philanthropic organizations that operate in over 30 countries worldwide and work collaboratively with non-governmental and other organizations. Soros has taken the lead in multicultural education, especially among the newly independent countries in Europe and Asia. In Kazakhstan in May 2000, it hosted a Conference on Multicultural Education in Central Asia, whose goals were to strengthen the role and position of non-governmental organizations in solving problems of multicultural education, and to involve government authorities in dialogue with the non-governmental organizations. Participants were to discuss the problems of multicultural education, ways of solving national minorities' problems, and strategic directions of activity, including mother tongue and bilingual programs.

One possible candidate for leadership on language is UNESCO. Since its report in 1953 on vernacular languages in education, it has led and participated in many actions relating to language. Could it take the leadership again, along with its leadership in the movement of Education for All? It is likely that UNESCO would fully participate in new initiatives regarding language, such as suggesting areas for research, but because of its financial situation it would have to rely on other organizations for financial support, organizations that themselves would undertake the leadership role.

Could the World Bank, as the biggest international donor to education, provide the leadership in language matters? It could, but so far we have seen neither the interest nor the will to do so. Language is viewed as sensitive, political, divisive – as if education for all and education for girls were not equally sensitive, political, and divisive. The World Bank has seldom hesitated to take a stand when steps necessary to economic recovery have proven sensitive, political and divisive. Yet the Bank as a matter of policy has not encouraged programs in local languages. In all cases quoted in this report, the Bank has waited for the countries to signal their interest in either mother tongue or bilingual education, rather than strongly recommending that course of action.

What about the professional associations? They seldom address language in education issues on an international basis. The International Teachers of English to Speakers of Other Languages (TESOL) and the International Association of Teachers of English (IATEFL) provide forums for worldwide discussion of teaching English, and TESOL actively supports mother tongue education in the US. The National Association for Bilingual Education (NABE) in the US responds to domestic concerns on the education of language minority students. The International Association for Applied Linguistics (AILA) has a scientific commission which can address language in education, but their papers do not reach the general public. The Comparative and International Education Society (CIES) occasionally discusses language concerns, but these discussions seldom attract the attention of educators working in mother tongue or bilingual education. In other words, mother tongue or bilingual education as an international issue falls through the organizational cracks.

Actions

What would such leaders do about the language of instruction? We can offer three kinds of actions in priority order: serious research; support for pilot programs, including teacher training; and high level advocacy.

First, leaders would encourage and support documentation of and basic research on existing programs, including those discussed in this paper. In spite of the wealth of evidence available to psycholinguists and sociolinguists, this information rarely penetrates the thinking of those who work in international education. Therefore, to reassure leaders worldwide that investment in mother tongue education has cognitive benefits for individuals and economic benefits for countries, serious documentation and research should be pursued.

The results of this research would be distributed widely. Leadership organizations would not bury the results in linguistic journals that their international education colleagues did not read, but would publish the studies through media appropriate to the target audiences. Not too long ago, the case was made for the importance of primary education by studies of farmers which showed that farmers who had some education produced more than those who did not, as well as by studies which indicated increased earning power for individuals which accrue to each additional year of education. Studies on the value of women's education are also relatively recent, but equally convincing, showing the correlation between primary level education for girls and increased child survival and family health and nutrition when those girls became mothers. These studies, widely quoted and commented upon, have generated wide support for primary education, including more and better education for girls. They have resulted in conferences and campaigns worldwide and priorities for country development (see King & Hill, 1993; Lockheed, Verspoor, & Associates, 1991).

At present, in addition to the research pursued by linguists, there are many studies of individual experiences in specific countries. However, these programs usually operate in isolation, with participants discovering for themselves what works and what does not. Documentation, when it occurs, is driven by donor requirements or the odd doctoral dissertation. It is seldom published, residing instead in file drawers or on the computer disks of evaluators whose work may have long since been forgotten. Indeed, what makes a report like this difficult to compile is the absence of published documentation on experiences worldwide.

Leaders would encourage studies of mother tongue and bilingual education in many countries, and then support meta-analyses of these studies. These analyses would help build a convincing and credible body of research and experience to help convince donors and governments that such actions are possible, practical, and useful.

Second, as part of the research agenda, leaders would sponsor or co-sponsor two or three well-run pilot programs in countries where there is support for mother tongue instruction. This could be done at low risk and low cost by piggy-backing onto existing programs. In addition to working with these pilot programs, leaders would encourage government-approved program development in several types of countries. Program development would include curriculum and materials development; teacher recruitment, training and supervision; program expansion; and effective measures for building community and national support.

Third, leaders would insert into the agenda of worldwide conferences language of instruction issues that emphasized possibilities as well as problems, stressing the importance of both quality education based in a language known to the child and the opportunity to learn an international language later on. They would call other worldwide or regional conferences to focus on language in education. They would bring together the major players – country representatives, donor organizations, non-governmental organizations, academic researchers, and grassroots language workers – to discuss issues and share experience and research. They would help others to understand the problems and the resistance, as well as the successes.

The leaders would become advocates for mother tongue instruction. Their advocacy would be credible because it would be based on solid research, experience and programs in the style and media available to all members of the international community.

Country Assistance

International organizations may not be ready to assume the kind of leadership outlined above. Nevertheless, much can still be done. Multilingual countries can benefit from many kinds of assistance. Whether they have begun mother tongue and bilingual programs or are contemplating them, they can often benefit from help in six interrelated areas: language development and language planning; advocacy and outreach; program planning; curriculum and materials development; teacher training and recruitment; and program research and evaluation.

Setting priorities is difficult. Are language development and language planning the most important? There must be some agreement about the writing of the language before a literacy program can begin. Often some language survey work is needed to determine the boundaries of language groups before a program begins, as well as later on during the expansion phase. Is advocacy the most important? Programs may not continue when they lack community or ministry support, especially when outside funding dwindles at the end of the pilot phase. Program planning? Many small projects do well with *ad hoc* planning. It is only at the expansion phase that planning becomes critical. Classroom materials or teachers? Some believe that, on the basis of research in developing countries, the availability of materials is more important than the presence of well-trained teachers in improving student scores on examinations. Others disagree, saying that quality education cannot take place without teachers who know their subjects and who, in the case of mother tongue and bilingual programs, can use the languages comfortably in the classroom. Program research and evaluation? For the funding agencies, evaluation may become the most important aspect, because the outcomes determine their own actions. However, many successful programs have continued without evaluation or documentation because resources for these activities were not available. The leaders were too busy implementing or expanding programs to take the time to write even anecdotal observations or narrative histories of the program.

We must conclude that all areas are important, and that setting priorities in a theoretical sense is impossible. Decisions on priorities must respond to the context of a specific country.

Language Development and Language Planning

Language development and language planning must be ongoing. When countries begin to codify their own languages, they will need help from those who have done it before. When they prepare to make decisions about which dialects are the best choices for education, they will need to take into account the attitudes and feelings of the speech communities involved. When they need to find words to express concepts that are not part of the traditional worlds, they will also need to listen to the community members for the ways new words are formed. At first, all of this may require outside assistance or on-the-job training. However, very soon the countries should develop their own linguistic infrastructure at such places as the university, the Ministry of Education, or free-standing language planning agencies. Planning for this should begin early. In Eritrea, for example, the language teams that were responsible for writing textbooks in the local languages and for promoting the use of those languages undertook long-term study in England to improve their skills in language planning as well as program planning, materials development, and teacher training.

Agencies that want to help in this area could provide direct technical linguistic assistance, could fund study abroad for language specialists, or could help build in-country institutions which can carry on language planning on a permanent basis.

Advocacy and Outreach

Advocacy, or "social marketing," means building constituencies. It may involve a widespread advertising campaign, with posters on buses, announcements on the radio, and puppet shows in the villages. Advocacy has been useful in the health field, and could also be so in education, specifically in terms of the campaigns for girls to enter and stay in school. No such effort, to our knowledge, has occurred in terms of education in the mother tongue.

Advocacy also means reaching directly the groups of people necessary for the sustainability of programs, particularly beyond the pilot phase. These include parents, teachers, and especially mid-level education officials. Although there are training courses in how to reach the stakeholders in education, perhaps the best way of building capacity in this area comes first from understanding the need for this activity, and factoring it into the plans.

Outreach is less technical. It means having the program firmly rooted in the community by whatever means possible: developing the program at the request of the community, developing materials closely with community members, having the community choose the teacher on the basis of leadership and involvement with the culture, and other means of ensuring the participation and support of the local community.

Program Planning

Program planning can also be called education planning. Agencies wishing to help in this area can offer direct technical assistance, sponsor study trips abroad, or otherwise help build capacity within the Ministry of Education or other local educational institutions. This help can involve building information management systems that will benefit other parts of the education system, assisting with education finance concerns, and contributing to structures that support planning.

Curriculum and Materials Development

Materials development is a process that should be ongoing in all programs. There are no textbooks anywhere that do not eventually become outdated. As countries begin to appreciate the importance of textbooks, they must plan for their renewal and republication as well as for retraining of the teachers. For local language programs, this may mean progress from straight translation to original works attuned to the culture of the country, as has been the case in Ethiopia. It may also mean progress from linguistically accurate textbooks written by linguists to those that are linguistically appropriate but written by educators, the process now going on in Guatemala.

The best way of building capacity here is with experience. Countries that were used to importing their texts from abroad, often from the former colonial country, must learn by trial and error what it means to create their own materials, and then handle the logistics of publication and distribution themselves. Why would such countries want to develop, publish and distribute the materials themselves? There are several reasons. Materials will be more relevant and in small print runs less costly than books imported from outside the country. Furthermore, when the Ministry contracts publishing of education materials to private local firms, indigenous enterprises receive the opportunity to grow and incentives to develop and print other materials in the local languages.

Agencies helping in this area often supply curriculum and materials development experts to help train local people. This is effective when there is ample time for training, although when agencies push to meet their own schedules, the experts can end up doing the work themselves, leaving the country with books but little lasting capacity development. In addition, agencies can send local people to other countries to observe how they are managing their curriculum and materials development.

Teacher Training and Recruitment

Teacher training is key to the sustainability of any education program. As programs expand, there must be new teachers capable of teaching bilingual classes. Usually programs begin with in-service training for the teachers in the pilot program. When the program expands, it must provide pre-service training as well, in order to ensure a supply of well-trained teachers who are able to teach in the local language. The first requirement for teachers working in mother tongue or bilingual programs is that they know the languages and can use them in a classroom comfortably. This usually requires training, because even if the teachers have been speaking the local language all their lives, they need to be fluent in reading and writing the language as well. Therefore, when possible, the local language should be used as the medium of instruction for teacher training, with ample opportunity for practice in academic settings in the local language.

Teacher recruitment becomes essential, both to fill the places in the new schools and to refill those in the schools in the original program. Experience has shown that many teachers, discouraged with the low pay typical of village schools, leave those jobs when they have more qualifications and experience so that they can benefit from the advantages of larger towns. There is thus a continual need to identify teachers able to teach in the local language. On a national or regional level, it is the Ministry's responsibility to enter language information into the database kept on all teachers so that placement can be appropriate and resources in different languages can be tracked. This is now possible in Guatemala through a newly updated information management system.

Agencies wishing to help can send in experts to work with teacher trainers. When the opportunity arises, they can work within the normal schools or teachers' colleges to build the capacity for training teachers in local languages and to begin to change teachers' traditional classroom behaviors. Changing methodology is important in societies that are taking on democratic functions. The traditional teaching methods of rote learning in large classes were well suited to societies where the individual would not be expected to use his or her judgement and where memory in the foreign language was all that was called for. But as countries become more democratic, it is important to consider changing teachers' approaches to teaching and learning. This change involves training in the methods of "active learning," in which students discover answers for themselves and have the opportunity to develop critical thinking skills. Agencies wishing to help could offer opportunities to work with experts from abroad or skilled teachers within the country who have learned new ways of approaching their students.

This approach, often termed "training of trainers," has proven effective in the United States and elsewhere as a way to develop local capacity and multiply the benefits of skilled intervention. In one model, teams from schools or agencies attend a week-long institute in which they receive professional development in an aspect of mother tongue education such as initial literacy instruction. These teams then return to their communities and share the knowledge gained with teachers there. In addition, team members work together to expand the knowledge base in the ensuing weeks, and the team remains in touch with teams from other sites as well as with the external experts. With technological advances in electronic communication, this option may in fact be more possible around the world today than it has been in the past. The participant/trainers can seek ongoing advice and assistance from the external experts as they work locally to apply what they have learned. It is helpful to have follow-up reunion meetings of the teams of trainers, so that they can share their experiences and materials. Many other professional development models hold similar promise for disseminating knowledge about effective approaches to education in multilingual societies.

Another important component to consider in teacher training is professional development for teachers who will help students transition from education in their mother tongue to another medium of instruction. Certain principles should be followed in planning that transition process, including instruction to support transfer of literacy skills, integration of language and content in instruction in the second language before the transition is made, and support for second language learners after transition through sheltered instruction and other techniques. All teachers need information about supporting the transition process, but particularly those who will receive students who are switching to a medium of instruction that is new to them.

Research and Evaluation

Research and evaluation are always important and are often neglected in education, especially in countries where most of the money must go to pay teachers and staff. However, to improve school quality and to foster improvements in student achievement, it is essential to assess student learning. Nowhere is this more important than in programs featuring the use of local language, since many within the school system or government may be skeptical about the effectiveness of such programs, and it is necessary to demonstrate that students are well served by them. Educators may read about or even observe classes in other countries where the children are active and engaged because they understand the teacher. Until they see the positive results of such approaches in their own countries, however, they tend to believe that this experience doesn't apply to them. Here again it is necessary to encourage the development of national-level capacity. Two commonly-used approaches are to bring in outsiders to teach in the universities and to assist local evaluation teams, and to send individuals abroad for advanced university training. There are advantages to both methods, but with the fears of "brain drain" on the part of some governments, some countries would prefer that the experts come to them.

Another important reason to incorporate research and evaluation into the implementation of new educational programming is to encourage continuous program improvement. Often, approaches are being adapted that have been proven in programs elsewhere, and local needs must be addressed. Some of this can be managed in the planning phase, but some features can only be refined based on local experience once implementation is underway. Formative evaluation (that is, evaluation *during* implementation) can provide important clues into which strategies and structures are more and less effective. The gathering of data on a variety of performance measures (on teachers, students, attainment of objectives, and so on) encourages reflection on how to make the program better for the local situation. Examination of such data on a regular basis provides the opportunity for all the stakeholders to see successes and to think about areas for improvement.

For our purposes here it is simply important to note that research and evaluation are important and that agencies wishing to help in this area should look for ways for Ministries to develop in-country capacity.

V. Conclusion

In introducing this report we stated that in linguistically diverse countries, members of groups whose mother tongue is not one of the officially recognized languages have difficulty gaining access to the services, particularly in education, that would enable them to become fully participating citizens of their countries.

So far the international community has failed to act on the evidence that learning first in the mother tongue is the foundation for future learning, including learning the officially recognized languages. This ability to learn is the path to being able to participate in the life of the country and interact with citizens of other countries.

The international community has recognized that it is failing the world's children, despite international and country efforts of the last 10 years. The most recent international conference on education, the World Education Forum in Dakar, Senegal in April 2000, concluded, "It is not acceptable that more than 113 million children (mostly girls) have no access to primary education, 880 million adults are illiterate, gender discrimination continues to permeate education systems and the quality of learning falls short of the needs of societies." The participants pledged to address the challenges of the twenty-first century by focusing on the importance of educating girls, providing quality learning, and reaching those who continue to be excluded from education: "girls, working children, children of ethnic minorities, and children affected by violence, conflict, disabilities and HIV/AIDS" (World Education Forum, <http://www2.unesco.org/wef>). As noted earlier, language issues were not specifically mentioned in materials so far available from the conference.

Lack of access to schools, equity of opportunity to learn, and quality of schooling – they are all tied into issues of the language of instruction. In terms of access, for those 113 million children not in school, it may be that there are neither teachers nor buildings for schooling, and thus these children are denied physical access to school. However, for many other children enrolled in school, cognitive access is denied because they cannot understand the language of instruction; they are denied the education which would give them a basis for further learning. In terms of gender equity (and access), when the language of school is the language used in the wider society, girls who are most often at home may not have the same opportunities as boys to learn the language spoken outside the home. When those girls attend school, they may not learn as well as the boys who have had more opportunity to learn the language of the wider community. In terms of equity for children of ethnic minorities, it is ironic that in many developing countries the ethnic majorities are also denied access to education because they do not know the language of instruction; because it is essentially a foreign language (the case in many African countries), they do not have the opportunity to hear that language spoken outside of school. In terms of school quality, or what and how well children are learning in school, again language is critical. Schooling is communication. Without knowing the medium of communication, the language of instruction, there can be little learning.

We conclude that the issue of the language of instruction as it relates to all parts of the school population, the "served" and the "underserved," is intimately linked to the concerns of access, equity, and quality. Unfortunately, however, this issue remains hidden from view.

The advantages of schooling using first the mother tongue and then adding a second language are indisputable. G. Richard Tucker of Carnegie Mellon University has said it best. In an address to linguists and language educators at Georgetown University in 1999, he stated,

> *The cumulative evidence from research conducted over the last three decades at sites around the world demonstrates conclusively that cognitive, social, personal, and economic benefits accrue to the individual who has an opportunity to develop a high degree of bilingual proficiency when compared with a monolingual counterpart. The message for educators is clear: draw upon community resources and involve diverse stakeholders in all phases of program planning and implementation, implement carefully planned and well articulated sequences of study, utilize trained and committed teachers, and begin innovative language education programs that will lead to bilingual or multilingual proficiency for participants as early as possible. The graduates of such programs will be culturally rich, linguistically competent and socially sensitive individuals prepared to participate actively in our increasingly global economy (Tucker, in press).*

This report is a plea to bring the language issue again into the realm of international discussion and action. Given the universality of multilingual societies, and the prevalence of bilingualism and multilingualism throughout the world, innovative language education programs should be the norm, not the exception. The purpose of schooling is to enhance children's learning. Children can only learn through a language they know. By learning through their first language, children reinforce their identity within their group and become functional within their home and village. They also gain the cognitive basis for learning the national language so that as adults they can help their country relate to an increasingly interdependent world.

Learning first through the local language is the indispensable gateway to becoming locally functional and globally competitive. For politicians, educators, and development specialists the course of action is fraught with difficulties. With leadership, political will, community support, and shared experience, those difficulties can be overcome.

Annexes

Annex A

Summary of Programs Discussed

Bolivia
Cameroon
Côte d'Ivoire
Eritrea
Ethiopia
Guatemala
Indonesia
Mali
Mexico
Namibia
Papua New Guinea
Philippines
Vietnam

Definitions

Adult literacy rate: Percentage of persons aged 15 and over who can read and write. Neither language nor criteria for literacy is specified.

Net school enrollment ratio: Number of students enrolled in either primary or secondary school who belong to the age group that officially corresponds to that level of schooling, divided by the total population of the same age group.

Gross school enrollment ratio: Number of students enrolled in either primary or secondary school, regardless of age, divided by the population of the age group that officially corresponds to that level of schooling. The gross ratio will include both under-age and over-age students.

Primary school entrants reaching grade five: Percentage of children entering the first grade of primary school who eventually reach grade five.

Sources

Unless otherwise noted, sources for information on these countries are as follows: For population data, *The Little Data Book*, World Bank, 2001; school enrollment and literacy, UNICEF, *The State of the World's Children, 2001;* and languages, B.F. Grimes, *Ethnologue*, 2000.

Bolivia

Country Data

Population (2001): 8 million

Linguistic groups as percentages of the population (based on 1992 Census, adjusted for age 0-5 and 10 percent not included in the Census)

Quechua: 30 percent
Aymara: 21 percent
Guaraní: less than 1 percent
Spanish: 40 percent
Other: less than 1 percent

Note: 60 percent of Bolivians do not speak Spanish as a first language. Of these, approximately 12 percent are monolingual in a non-Spanish language (Hyltenstam and Quick, 1996).

Language Policy

No official language, but *de facto* Spanish is the official language. Quechua, Aymara, and Guaraní are used in some domains, including education.

Role of Language in Education

The National Education Reform Program (1994) established bilingual and intercultural education at the primary level. Programs were developed in Quechua-Spanish, Aymara-Spanish, and Guaraní-Spanish. Some attention has been given to the minor languages recently.

Literacy Rate (1995-1999)

Male: 92 percent
Female: 78 percent

Net Primary School Enrollment Ratio (1995-1999)

Male: 95 percent
Female: 87 percent

Percentage of Primary School Entrants who Reach Grade 5 (1995-1999)

47 percent

Gross Secondary School Enrollment Ratio (1995-1997)

Male: 40 percent
Female: 34 percent

Innovative Program: National Education Reform of 1994

Description of the Program

Bilingual and intercultural education is an integral part of comprehensive education reform, requiring changes at all levels of formal and non-formal education and training, and involving the principles of decentralization and popular participation. The term *bilingual* refers to the teaching *of* and *in* two languages, for both indigenous language speakers and monolingual Spanish speakers. The term *intercultural* refers to the goal of encouraging students to become knowledgeable in aspects of both the Hispanic and indigenous cultures, thus developing their own cultural identity as a product of the combination of cultural features of different origin. These bilingual and intercultural features continue through at least Grade 5.

The World Bank has financed much of the primary level reform through its Education Reform Project. The Swedish International Development Agency (SIDA) financed and UNICEF assisted in the execution of a precursor project, *Proyecto Educación Intercultural* or PIEB. PIEB operated in 140 Aymara, Guaraní, and Quechua schools from about 1988 to 1995.

Materials

In 1997, Luis Enrique López, formerly a general advisor to the Education Reform Project of the World Bank and chief of PROEIB Andes (see below), said that the project had developed textbooks in mathematics and language for the first three grades. From 1993 to 1995, the project furnished classroom and school libraries with 370 different titles, for a total of 6.5 million books. Included in the school libraries are 123 titles, or 2.5 million books, by Bolivian authors, written and printed in Bolivia. These 123 titles represent winners in a national contest for Bolivian authors from a total of 750 submissions.

Teacher Professional Development

In 1997, there were 800 school clusters in operation and over 800 trained advisers. Part of the reform is to transform six of Bolivia's 24 Normal Schools into higher level education centers, two geared to Aymara, two to Quechua, one to Guaraní, and one for the other minority linguistic groups. Two of the largest universities (San Andrés and San Simón) have opened new programs to train bilingual educators. In the early years of the program, 70 teachers were trained at the University of the Altiplano in Puno, Peru, an outgrowth of a bilingual education project in Peru financed by the German Agency for Technical Assistance in the 1980s. In Bolivia, there is still a need for linguists, anthropologists and teachers to carry out the government's ambitious plans.

PROEIB Andes

The Bolivian Education Reform has benefited from the presence of a unique regional organization, *El Programa de Formación en Educación Intercultural Bilingüe para los Países Andinos* (PROEIB Andes). Composed of organizations in six countries (Argentina, Bolivia, Colombia, Chile, Ecuador and Peru), PROEIB aims to consolidate intercultural bilingual education by training teachers and community leaders, engaging in research, and offering technical assistance. Under the auspices of PROEIB, more than 50 indigenous students from Bolivia, Chile, Colombia, Ecuador, and Peru have received Master's degrees in intercultural bilingual education from the University of Cochabamba, Bolivia. In July 2001, a new class of 35 Master's level students began studies. PROEIB Andes receives support from the German Agency for Technical Assistance (GTZ), many Bolivian organizations, UNESCO, UNICEF, the government of Belgium, and the Organization of Iberian American States. Scholarships for the Master's program come from governments, indigenous organizations, and foundations, including the Ford Foundation.

Evaluation

Evaluations have occurred as part of the supervision process of both the earlier PIEB and the World Bank-assisted project. In a 1996 report, SIDA evaluators for PIEB emphasized the importance of continuing the project as a separate pilot and not folding it into the reform. They argued that the small scale program could be controlled and problems corrected before large scale implementation. They also proposed extending the program in the pilot schools to cover Grades 6 through 8 in order to ensure success in achieving language proficiency in two languages (Hyltenstam & Quick, 1996). At this writing we do not know if the PIEB pilot remained separate from the reform or if the intercultural bilingual program has proceeded in Grades 6 through 8.

Status Now

A bulletin from PROEIB Andes stated that in November 1999 the annual supervision mission for the Education Reform Project of the World Bank reported satisfaction with management relating to teacher permanence, the timely delivery of school materials, the participation of village education committees, and the transference of normal schools to the university administration. The mission recommended increased emphasis on the intercultural ideal, especially for Spanish speakers of Hispanic descent.

Cameroon

Country Data

Population (2001): 15 million

Linguistic and Ethnic Groups as Percentages of the Population

Cameroon presents a complicated ethnic and linguistic picture. Over 50 percent of the population is composed of 4 ethnic groups who speak more than the language their name represents. These are the Bamileke, Fang, Duala, and Fulani.

Cameroon also has several trade languages that are used across ethnic and linguistic groups. The largest of these is Cameroon Pidgin, or Wes Cos. Others are Duala, Ejagham, Gbaya, and Limbum, although their mother tongue speakers are much fewer in number. Bulu, spoken as a mother tongue by less than 1 percent of the population, is also used as a language of wider communication. Of the 282 living languages, those listed below are spoken by a little over 52 percent of the population, although Pidgin is not considered as having mother tongue speakers. There are no available figures for English and French use.

Beti: 13 percent (includes a group of 7 languages, but ethnically distinct groups)
Cameroon Pidgin (Wes Cos): 13 percent (as a second language). It is estimated that 50 percent of the population uses Pidgin as a lingua franca.
Fulfulde (Adamawa Fulani): 7 percent. (Spoken by 33 percent of the population as a second language.)
Bamilike: 5 percent (includes Fe'fe', Medumba, Nda'nda, Ngiemboon, Ngomba, Ngombale, Yemba)
Ewondo: 5 percent (also trade language)
Ghomálá' (Banjun): 2 percent
Basaa: 2 percent
Bamun: 2 percent (also trade language)
Mafa: less than 1 percent
Kom (Bikum): less than 1 percent
Tupuri: less than 1 percent
Masana: less than 1 percent
Bulu: less than 1 percent (also language of wider communication, spoken by 5 percent of the population)

Language Policy

French and English are the official languages of Cameroon. French is used mainly in the Littoral, West, Center, South, East, Adamawa, North and Far North provinces, and English is used mainly in the South West and North West provinces.

Literacy Rate (1995-1999)

Male: 73 percent
Female: 53 percent

Ethnologue notes low literacy rates (1 percent) in many languages, but higher literacy rates (5-15 percent) in a second language, but there is no indication as to which second language.

Net Primary School Enrollment Ratio (1995-1999)

Male: 82 percent
Female: 71 percent

Percentage of Primary School Entrants who Reach Grade 5 (1995-1999)

51 percent

Gross Secondary School Enrollment Ratio (1995-1997)

Male: 32 percent
Female: 22 percent

Innovative Programs: Projet de Recherche Opérationnelle Pour l'Enseignement des Langues au Cameroun (PROPELCA) Association Nationale des Comités de Langues Camerounaises (ANACLAC)

Descriptions of the Programs

The purpose of the PROPELCA project, launched at the University of Yaoundé I, Cameroon, in 1981, was to find out how Cameroonian languages could be taught to supplement the teaching of French and English, the two official languages of the country. The project had four stages. The first was the promotion of French-English bilingualism at the secondary level. The other three stages were concerned with the protection and promotion of local languages in kindergarten, primary, and secondary education. Researchers conducted research in private schools in order to convince public school officials of the value and necessity of introducing mother tongue instruction into the education system. The motivation for launching such an educational linguistics project was to regain the Cameroonian people's linguistic identity.

The PROPELCA program proposed the use of the mother tongue languages for the first few years of primary education when children are taught to read and write. By the third year, when the child has acquired basic literacy skills, the curriculum introduces a progressive transition toward one of the official languages, either French or English, according to the region of the country.

ANACLAC (also known by its English name, the National Association of Cameroonian Languages Committees, or NACALCO) was created in 1989 and consists of 62 language committees throughout the country. These language committees are themselves local non-governmental organizations emanating from and mandated by natives of the respective languages. Tadadjeu states:

> *Each mother tongue project is a local development project per se. It is not just a language program which may or may not contribute to local development. It is an integral part of local development. There is an urgent need to make this fundamental vision understood and accepted by both government officials and local leaders, not only in Cameroon, but also all over the continent. Many of them are so used to the top-down vision of development policy that they tend to be rather indifferent to this new approach which is a mixed bottom-up-top-down approach, combining the general orientation from the national perspective with the specific needs of local communities (Tadadjeu, 1999).*

Working toward a pan-African objective of literacy in all African languages, in 1998 ANACLAC adopted the project for Basic Standardization of All African Languages (BASAL). ANACLAC is the national institution which will take responsibility for implementing the continent-wide BASAL project. It is proposed as a joint project for the initial development of unwritten African languages to be carried out by partner institutions and persons involved in education, applied linguistic research, and sustainable development of African communities through literacy and training of adults. The BASAL project will involve some 3,000 linguists coming from academic as well as non-academic circles. Most of them will be, according to Maurice Tadadjeu, trained volunteers of the Organization of African Unity (OAU). They will spend one or two years living within an assigned language community, studying the culture and creating an orthography and initial literacy products (following the SIL International model).

Côte D'Ivoire

Country Data

Population (2001): 16 million

Linguistic and Ethnic Groups as Percentages of the Population

There are about 60 ethnic groups in Côte d'Ivoire. The largest ethnic groups are the Baoulé, Senoufo, Malinke, Agni, and Wè. There are significant other African populations (approximately 3 million) from Mali and Burkina Faso, as well as immigrants and refugees from several of other West African countries. Smaller groups include Lebanese and French.

Baoulé: 14 percent
Senoufo (all varieties): 8 percent
Anyin: 4 percent (estimated additional 10,000 to 100,000 second language users)
Wè (all varieties): 3 percent
Bete: 3 percent (language use is widespread)
Attié: 2 percent
Mahou: 2 percent
Jula (Dyula): 1 percent (trade language)
Abé: 1 percent
Abron: less than 1 percent
Kulango: less than 1 percent
Jula, Odienné: less than 1 percent
Adioukrou: less than 1 percent
Soninke: less than 1 percent
Lobi: less than 1 percent
Other: 59 percent (includes French. Estimates are 30,000 first language speakers, but there are no figures for second language use.)

Language Policy

French is the official language.

Role of Language in Education

Education is free and primary education is compulsory. All education is in French, although there are attempts to introduce Baoulé, Bete, Senoufo, and Jula at the university level as adjunct courses. In the northern part of the country, Jula and Senoufo have been used since the 1980s in preschool and the first two years of primary school before transitioning into French.

Literacy Rate (1995-1999)

Male: 63 percent
Female: 37 percent

Net Primary School Enrollment Ratio (1990-1999)

Male: 63 percent
Female: 47 percent

Percentage of Primary School Entrants who Reach Grade 5 (1995-1999)

70 percent

Gross Secondary School Enrollment Ratio (1995-1997)

Male: 33 percent
Female: 16 percent

Innovative Program: Le Centre Scolaire Intégré du Niéné (CSIN)

Description of the Program

The purpose of the CSIN is to develop a two-pronged community development program spanning five administrative departments in northwestern Ivory Coast. From east to west, these departments are: Ferkessédougou, Korhogo, Boundiali, Odienné and Tingréla, located in the extreme northwestern part of the country.

The first aspect of this community development program is concerned with providing pre-school education based on a logical-reasoning approach using two local languages, Senoufo and Jula, as a means of communication. This mother-tongue pre-schooling is provided to a number of children between the ages of four and six throughout an area composed of 12 village schools. This part of the program also includes a literacy component geared towards the illiterate parents of the children, especially their mothers.

The second aspect of this community development program deals with the promotion of agricultural and animal husbandry activities which are supported by an agribusiness.

Between the ages of five and six, the children in the 12 villages receive a year of preschool activities in the language of their environment – the Jula language for the Jula children and the Senoufo language for the Senoufo children. The preschool activities in which they are involved are psychomotor tasks, graphic arts, language acquisition using pictures, and initiation to logical reasoning using early-learning games. The preschool year is followed by six years of primary education with a curriculum different from the French-based curriculum implemented elsewhere in the country at the primary education level.

This means that after the year of preschool, continued education will occur over six years in a special elementary school setting. Two cohorts of students (40 Jula and 40 Senoufo children) will be added each year until 2003, when the first two cohorts of Jula and Senoufo children enrolled in the program in 1996 will graduate from elementary school. The second two cohorts who started in 1997 will graduate in 2004, and so on. The first two years (preschool and CP1) are taught in the local language only. French is taught as a subject during the next two years (CP2-oral, and CE1-oral and written), while Senoufo or Jula remain the language of instruction. During the final three years of elementary school, French is the main language of instruction.

The training for the children's parents, which started in 1997, is completed over three years in two phases. During the first year, literacy is acquired through the language spoken by the adult trainee, Jula or Senoufo. This first phase of training is subdivided into the stages of pre-literacy and a literacy period which is concerned only with reading activities in the local language. The second phase of the training is spread over a two-year period and is called "literacy in French." It is a two-level training. Level 1 is used to instill survival or basic French necessary for adults to communicate at the village level. Level 1 also includes the acquisition of writing skills in the spoken local language. Level 2 deals with the French language used for the purposes of correspondence and administrative tasks. In this way, every year, there is a new cohort of 50 adults, half of whom are female, who are taught new skills through literacy. The first "graduation" of this adult literacy component of the northern community development occurred in 2000, to be followed by the next in 2001, and so on.

History

The project was first started in October 1979 at the Institute of Applied Linguistics (known under its French acronym ILA) of Abidjan University by a few researchers. It aimed to develop a preschool program for Ivorian children with an emphasis on those living in rural areas without as many pedagogical resources as urban area schools. The pilot classes were first open in the central (Bouaké) and western (Man) areas, then in the northern (Korhogo), western (Touba) and southern (Dabou) parts of the Ivory Coast. By 1983, the country-wide experiment was superseded by a pilot project focused on key areas only in the northern region of the Ivory Coast, to become known as the *Projet Nord* (Northern Project).

The northern region was chosen for three main reasons: (1) its low primary school enrollment, (2) its endemic malnutrition, and (3) its overwhelming numbers of cases of goiters with a chance of cretinism for children born and raised in this part of the country. To develop this area, a three-part program that included a preschool program, an agricultural and animal husbandry program, and a nutritional program for parents of the schooled children was put in place.

In 1986, two years after the program was launched in northern Ivory Coast by both ILA and IRMA (*Institut de Recherches Mathématiques*), two other university institutions joined the program, giving it a multidisciplinary character. These institutions were the School of Pharmacy, which took responsibility for the nutritional and health aspects of the experiment, and the School of Science, which offered a training package on vegetable and animal biology and another training package in the study of living matter.

The Northern Project receives support from the Ivorian government, which provides teachers for the 12 schools operating under the project and also provides in-service agricultural and animal husbandry training for the teachers working for the project under the supervision of an agricultural engineer paid by the Ministry of Agriculture.

The Northern Project has also benefited from external support for its agricultural and animal husbandry section. Armor Development, a British non-governmental organization, provided the project with two vehicles, agricultural materials and money for truck farmers' produce. The Canadian Embassy in the Ivory Coast offered a transportation vehicle and also money for truck farmers' produce, and the Embassy of the Netherlands offered supplies of diverse seeds needed by farmers.

The embassies of both France and Belgium supported the research and training aspect of this Northern Project. For five years, from 1984 to 1989, the former financed research and training for the teachers involved during the experimental phase of the project. The latter gave school supplies for the first five-year phase of experimentation. Continued foreign support has sustained this project. Unfortunately, without this aid it would not be able to sustain itself.

Evaluation

The first written report on the Northern Project experiment was published in June 1986 by the Primary School Teaching Inspector of Korhogo. He gave high marks with respect to the results of the experiment. Two years later, in 1988, Nicolas Bennett, a World Bank specialist in education, wrote, "I was very impressed by the active participation of the children in their own education." In the aftermath of the report from World Bank, the Ivorian Ministry of Education sent to the project field two experts, Ouattara Abdoulaye, a general inspector and director of pedagogy, and Claude Jessua, an educational psychologist and expert in assessment. In November 1988, these experts gave a strong positive evaluation of the performance of the students in their logical reasoning skills and their command of the French language, even though they had had French as the language of instruction for only a few weeks beforehand.

The above three assessments on the Northern Project agree on two elements. First, the children coming out of the preschool project are alert, and the math-oriented reasoning they acquired through the use of their mother tongue (or the language most spoken in their family or neighborhood) predisposes them to succeed better in higher math during their primary education than students not enrolled in the program. Second, after the first weeks of their primary education these children show almost immediate fluency skills in their oral French. This project continues under the aegis of European-based NGOs.

Eritrea

Country Data

Population (2001): 4 million

Linguistic and Ethnic Groups as Percentages of the Population

Tigrigna:	50 percent
Tigré:	22 percent
Afar:	7 percent
Saho:	4 percent
Bedawi:	3 percent
(Hadareb) (Beja)	
Kunama:	4 percent
Bilen:	2 percent
Nara:	2 percent
Arabic:	6 percent

Language Policy

The national (or official) language is English. Tigrigna and Arabic are used in many official situations and documents.

Role of Language in Education

Mother tongue education is an important cornerstone for promoting equal educational opportunity. The Government encourages the selection of the language of the community as the initial language of instruction, but communities may choose which language they prefer: the mother tongue of most of the pupils, Tigrigna, or Arabic. Languages taught in the upper grades depend upon the initial selection. If the community chooses Tigrigna, students later are to learn Arabic and English. If the community chooses Arabic, the students later are to learn Tigrigna and English. If the community chooses another language, students later are to learn Tigrigna, Arabic and English.

Literacy Rate (1995-1999)

Male:	(no figure)
Female:	10 percent

Net Primary School Enrollment Ratio (1995-1999)

Male: 40 percent
Female: 35 percent

Percentage of Primary School Entrants who Reach Grade 5 (1995-1999)

71 percent

Gross Secondary School Enrollment Ratio (1995-1997)

Male: 24 percent
Female: 17 percent

Innovative Program: National Mother Tongue Program

Description of the Program

Since independence from Ethiopia in 1993, Eritrea has encouraged the use of the mother tongue for the initial stages of education. In 1995-1996, 67 percent of the 542 primary schools in the country had chosen Tigrigna, 22 percent had chosen Arabic, and the remaining roughly 11 percent had chosen Kunama, Saho, or Tigré as the language of initial instruction. When circumstances permit, members of the Language Panels of the Ministry of Education visit schools throughout the country to encourage the use of the mother tongue.

Materials

In 1996, textbooks were mainly pamphlets written in the field during the war for independence. The government was planning to revise the curriculum for all levels and develop new textbooks. There were materials in six of the nine Eritrean languages, with efforts underway to develop materials in the remaining three languages, one of which, Bedawi, had not yet been written. By May 2001, materials were available in all languages, including Bedawi.

Teacher Professional Development

Trained teachers are those who have graduated from secondary school and have completed about eight months of post-secondary education at the teacher training institute in the capital, Asmara. Members of the language panels have done some in-service teacher training.

Evaluation

In 1996, an evaluation team assessed the state of bilingual education. The team consisted of two consultants from SIL International and two members from each of the language panels. They visited 42 schools, half of which had chosen the mother tongue and the other half a non-mother tongue as the language of instruction. In both types of schools, rote teaching prevailed. Few teachers used texts, although in some cases there was an ample supply in the principal's office. The tradition has been not to give younger children school materials.

The evaluation team noted an improvement in flow rates for the mother tongue students in all grades except Grade 5, the final year of primary school. The team did not have the opportunity to question teachers about this lower promotion rate from Grade 5, but assumed it referred to the fewer places available in Grade 6, the first year of secondary school.

Recommendations from the evaluation included teacher training in methods of active teaching, provision and use of textbooks.

Status Now

Eritrea has given priority to developing a cadre of professional linguists and educators to serve as catalysts for the mother tongue program. Several members of the language panels have traveled to England to undertake studies of linguistics, sociolinguistics and bilingual education. Materials development has continued. Members of the language panels and the linguists from SIL International have completed a folklore project, compiling hundreds of stories, poems, and songs, which can be used in the schools and afterwards to sustain literacy.

71

Ethiopia

Country Data

Population (2001): 63 million

Linguistic and Ethnic Groups as Percentages of the Population

Amharic: 33 percent (including second language speakers)
Oromo: 26 percent
(Southern, Eastern, West-Central)
Somali: 5 percent
Tigrigna: 5 percent
Sidamo (Sidama): 3 percent
Gamo-Gofa-Dawro: 2 percent
Afar: 2 percent
Gurage (East): 2 percent
Hadiyya: 2 percent
Wolaytta: 2 percent
Gurage (West): 1 percent
Gedeo: 1 percent
Kaficho (Kefa): 1 percent
Kambatta (Kambaata): 1 percent
Other: 14 percent
Languages less than 1 percent and over 100,000 speakers:
Aari, Alaba (Halaba), Awngi, Bench (Gimira),Berta (Wetawit), Gumuz, Komso, Koorete, Xamtanga

According to the Central Statistical Authority (1998), over 59 million claim to speak English, although there is no information as to how well.

Language Policy

Article 5 of the 1994 ratified Ethiopian constitution declares Amharic to be the official language, continuing a policy established in 1991. Tigrigna and English also are national languages, with English being the language of wider communication. The constitution also states that "all Ethiopian languages shall enjoy equal state recognition." Hence, nationality languages can be used for official use and for primary education.

Role of Language in Education

Regional languages are the media of instruction for primary education. English is the medium of instruction for secondary and higher education. Both English and Amharic are taught as subjects from Grade 1.

Literacy Rate (1995-99)

Male: 40 percent
Female: 27 percent

Net Primary School Enrollment Ratio (1995-1999)

Male: 43 percent
Female: 28 percent

Primary education is not compulsory in Ethiopia. Less than one-third of the age cohort is enrolled in primary school.

Percentage of Primary School Entrants who Reach Grade 5 (1995-1999)

51 percent

Gross Secondary School Enrollment Ratio (1995-1997)

Male: 14 percent
Female: 10 percent

Innovative Program: Basic Education System Overhaul (BESO)

Description of the Program

In order to understand Ethiopia's education reform, which, despite the low enrollments, is a far-reaching one, one needs to comprehend the history of this reform. During the period of the emperors (1850-1974) the policy was Amharization, from the large Amhara nationality group. During the Socialist Revolution (1974-1991) there was some use of national languages for adult literacy, but Amharic continued as the language of instruction in primary schools, with secondary and tertiary education in English. In recognizing national languages, the government is addressing a problem of diversity. In giving them status, it is also limiting the role of the central government.

Materials

The Institute for Curriculum Development and Research, a department of the Ministry of Education, is responsible for the monumental task of implementing the new language policy in the education system. It has sought help from outside sources; linguists from SIL International provided technical assistance on the development of linguistic databases and workshops on bilingual education, linguistics, and computer applications. However, much of the work has been done by nationals. This work has included turning out massive amounts of translated material as well as evaluating the value of the curricular materials in the schools.

During 1992-1993, teams of 150 teachers translated the Amharic core primary curriculum into four languages (Oromo, Sidama, Tigré, and Wolaita) for Grades 1 to 6. They accomplished this in just four months. During 1993-1994, core primary curriculum teams of about 200 individuals translated the curriculum and materials into four more languages (Gedeo, Hadiyya, Kambata, and Somali). Again, the teams accomplished this in four months.

Thereafter the pace slowed. Instead of the four-month deadline, the government set 18 months, with time for materials development and printing, pilot testing, and revision before nationwide implementation. Instead of translation, there was the opportunity to develop original materials based on the new primary curriculum criteria.

Evaluation

In 1993, the Institute for Curriculum Development and Research undertook an evaluation of implementation of the first phase, which included the Oromo, Sidama, and Wolaita primary curricula prepared in 1992. Students performed below the national averages. Three problems were common to all three nationalities: shortage of qualified teachers, shortage of materials, and difficulties with linguistically mixed classrooms. The problems were compounded by a decision to implement new materials simultaneously in all six grades. Despite the disappointing results on the examinations, the evaluation discovered that parent, student, and teacher attitudes towards using the nationality languages were positive (Boothe & Walker, 1995).

In 1999, under the BESO project (see below), the Southern region was scheduled to conduct an assessment of the impact of multilingual features on learning outcomes. The aim was to make test scores comparable across the 10 languages used in the region.

Teacher Professional Development

The Basic Education System Overhaul (BESO) project is helping the government with its education reform. Work is focused on three geographic areas: Tigré in the north, the Southern Nations, Nationalities and Peoples' Regions in the south, and the Central Ministry in the capital. The aim is to improve the quality and equity of primary education in an expanded system. The Academy for Educational Development, World Learning, and an Ethiopian non-governmental organization are assisting with project implementation. Activities include decentralization of management, distance education, upgrading of teacher training institutes, and curriculum development, including development of daily English radio programs.

Status Now

There have been great accomplishments within a short time. Teachers are using from 15 to 18 languages in the classroom. Many learning materials are available. Teachers from some of the larger language groups receive teacher training in which the trainers use the Ethiopian languages as the medium of instruction for both pre- and in-service training (Elisabeth Gfeller, personal communication, 1999).

Guatemala

Country Data

Population (2001): 11 million

Linguistic and Ethnic Groups as Percentages of the Population (based on 1994 Census)

Mayan: 42 percent
Garifuna: estimated 5,000 speakers included in the Mayan count
(non Mayan language)
Xinka: estimated 300 speakers included in the Mayan count
(unclassified language)
Ladino: 58 percent
(Mayan and Spanish mixed heritage)

Language Policy

The constitution of 1985 established Spanish as the national language and recognized the Mayan languages as heritage languages that should be respected. According to the government, 21 Mayan languages are spoken in Guatemala. About 42 percent of the population speak one of these languages, some exclusively, others with varying degrees of competence in Spanish as well. In 1999, the constitution was amended to state that the indigenous languages would be used for official documents and voting materials based on the availability of resources.

Role of Language in Education

The 1985 constitution indicates that bilingual intercultural education would be preferable where there are "indigenous" populations. Bilingual intercultural education refers to an "education based in the culture of the individual without displacing that culture, within the context of equality and respect for all in a multilinguistic and multicultural nation," according to a rough translation from a Ministry of Education 1994 booklet.

In 1998, as part of the peace agreements of 1996, which ended almost 40 years of civil war, a commission of Guatemalan educators and representatives from the indigenous groups elaborated an ambitious education reform. The reform aimed to guarantee quality education for all, including the use of indigenous languages along with Spanish as media of instruction within each linguistic community.

Literacy Rate (1995-1999)

Male:	74 percent
Female:	63 percent

Net Primary School Enrollment Ratio (1995-1999)

Male:	81 percent
Female:	75 percent

Primary education is compulsory and free for Grades 1-6.

Percentage of Primary School Entrants who Reach Grade 5 (1995-1999)

51 percent

Gross Secondary School Enrollment Ratio (1995-1997)

Male:	26 percent
Female:	24 percent

Innovative Program: General Directorate of Bilingual and Intercultural Education (DIGEBI)

Description of the Program

The General Directorate of Bilingual and Intercultural Education (*Dirección General de Educación Bilingüe Intercultural* or DIGEBI) offers bilingual education in a Mayan language and Spanish to Mayan children, mainly from one of the four major Mayan languages, namely Cakchiquel, Kekchí, Quiché, and Mam. In general it has been a transitional bilingual education program from the indigenous language to Spanish, although program staff speak of the importance of maintenance of the indigenous language and intercultural education.

History

The program has developed over almost 40 years. In 1964 the *castellanización* program began to teach Spanish to preschool children to prepare them for the all-Spanish primary school.

In 1980, U.S. A.I.D. financed a pilot project in bilingual education. Ten schools in each of the four major language areas taught children in both their mother tongue and Spanish, beginning with the local language and gradually increasing the amount of Spanish. These classes continued to Grade 4.

In 1985, the project became the Program of Bilingual Education, financed by the government, U.S. A.I.D., and the World Bank, with plans to expand to 400 schools, 100 in each of the 4 major language groups. By 1994 there were 800 bilingual schools, 400 offering pre-primary, Grade 1, and Grade 2, and 400 offering only pre-primary classes in the Mayan language. (We believe the original 40 schools continued to offer bilingual education to Grade 4.) At that time these programs reached about 13 percent of the indigenous children in the age cohort (Diaz Caballeros 1994). In 1995, the status of the program was raised to that of General Directorate of Bilingual and Intercultural Education.

In 1999 (the latest date with available statistics), there were about 1200 DIGEBI schools, enrolling about 230,000 children in 12 departments. The schools offer some kind of instruction in 14 languages. A few, presumably the original 40 schools, offer bilingual education up to grade 4 in the four major languages; others use eight other languages, mainly in preprimary and grade 1; the remaining offer preprimary instruction in two languages. This represents a coverage of about 22 percent for those departments, and about 19 percent for the entire country (Rubio, personal communication, 2001).

Materials Development

Indigenous curriculum specialists, linguists, writers, and illustrators have developed texts in the four Mayan languages that reflect Mayan culture and images and are consistent with the Guatemalan national curriculum in objectives and content. In 1983 there were 88 titles in development: readiness materials for pre-school classes, oral Spanish, and, in the four languages, texts for Grades 1 and 2 for reading and writing, mathematics, natural science, social studies, and practical arts. The World Bank funded the printing of many of these books. Current plans call for the revision of some of these materials. U.S. A.I.D. is focusing its current project on one department, El Quiche, where there will be new materials developed, possibly for 16 languages, according to World Learning, one of the contractors for the current project.

Much still remains to be done. Within El Quiche, the department where U.S. A.I.D. is working, few texts are available for the bilingual classes. In preprimary classes, only 50 percent of the bilingual classrooms had more than five texts; in grade 3, the transition grade to Spanish, only slightly more than 10 percent of the classes had bilingual texts. When teachers do have texts, they do not use them well. Teachers tend to have students copy from the text (40 percent of cases recently observed) rather than read from them (less than 15 percent of cases observed) (Proyecto MEDIR, 1999; Rubio, personal communication, 2001).

Teacher Professional Development

Professional development has played a significant role in the development of the DIGEBI program. In the beginning, many bilingual teachers were "promoters," indigenous persons who were not fully qualified as teachers, but who were graduates of primary school, bilingual in their language and in Spanish, and motivated to participate in community activities. Assisted by successive U.S. A.I.D. projects, many of those promoters are now fully qualified as teachers. Six of the country's 111 normal schools have begun to train bilingual teachers. Three universities now offer courses in bilingual education. U.S. A.I.D. projects have provided university opportunities to persons of Mayan heritage, including the DIGEBI staff, most of whom are now fully qualified professionals.

Evaluations

Evaluations have been a constant part of DIGEBI development. At the end of the pilot phase, the Grade 1 and Grade 2 bilingually-taught children showed reductions in dropout rates and gains in promotion rates over their peers in all-Spanish classes. An analysis of student achievement tests over 1986-1991 for students in Grades 1, 2, and 3 showed that the bilingually-taught students outperformed students in comparison schools on seven out of ten measures of academic achievement. The exceptions were Grade 2 Math, Grade 3 Math, and Grade 3 Spanish, where in all cases the mean scores were the same (Enge & Chesterfield, 1996). Because of the increased efficiency, the NEU schools were more cost effective than the traditional "unitary" schools (Chesterfield & Rubio 1997).

In a 1997 cost effectiveness study of DIGEBI and the Nueva Escuela Unitaria (NEU) (see description which follows), evaluators found that these two programs were more cost effective than similar schools without the innovative programs. (Cost effectiveness is measured by the average cost per student to produce a sixth-grade graduate in six years; cumulative costs for students for all years were divided by the number of students in sixth grade six years later.) This cost effectiveness occurred despite the additional operating costs for each student each year. Even when research and development costs, which will in reality be spread over a much longer time frame than the six years included in this study, were included, the innovative programs were cost effective for male students (Chesterfield & Rubio, 1997).

Recent data indicate that DIGEBI schools (in rural areas) demonstrate better internal efficiency than their rural counterparts, but far below the norms in urban areas. (Internal efficiency refers to rates of promotion, retention, and dropout.) Twenty percent of DIGEBI boys complete six grades in six years, in contrast to 14 percent of their rural, and 47 percent of their urban, counterparts. Fifteen percent of DIGEBI girls complete six grades in six years, in contrast to 10 percent of their rural, and 46 percent of their urban, counterparts (Proyecto MEDIR, 1999; Rubio, personal communication, 2001).

Innovative Program: New Unitary School Program (NEU)

Description of the Program

Beginning in 1993, U.S. A.I.D. helped finance the New Unitary School program as a component in its Basic Education Strengthening Project (BEST). Based on a model that had been successful in rural Colombia, the program stressed active learning, use of student self-instructional materials, peer interaction, and the utilization of community resources.

History

About a third of the primary schools in Guatemala are "unitary." This term describes one- or two-room schools, with one or two teachers to the school, where children of more than one grade are taught together in one classroom. They are most often found in the rural areas among the indigenous communities. The quality of education is often substandard compared to that of the graded schools because teachers are not trained in multigrade methodologies, and they do not have appropriate materials for students at different levels.

Although NEU was not conceived as a bilingual program, after a year of implementation the project director ordered the student guides translated into the Mayan language of many of the children in that department. About 25 schools began a cooperation with the DIGEBI schools. The program has proved enormously popular among parents, teachers, supervisors, and local officials. By 1996 there were about 1,000 public and private schools using or interested in using the program. This number included 200 public schools under the U.S. A.I.D. project, as well as others from the government's Social Investment Fund, UNICEF, and several non-governmental organizations. UNICEF has supported over 100 schools, called NEUBI, or New Unitary Bilingual and Intercultural Schools, which have combined the active learning methodology of the NEU schools with some of the bilingual-intercultural aspects of the schools of the General Directorate of Bilingual and Intercultural Education (DIGEBI).

Evaluation

In the 1997 final evaluation of the BEST project, the evaluators wrote: "The project's greatest success has been to demonstrate the effectiveness of pedagogical approaches based on child-centered, active learning principles for rural children of all genders and ethnicities." Students in the NEU program consistently outperformed comparison groups. They outscored their traditionally instructed counterparts on tests of Spanish language and mathematics. A significantly greater percentage of NEU children completed primary school in the normal six-year period than did similar children in traditional schools.

Innovative Program: National Community-Managed Program for Educational Development (Programa Nacional de Autogestión para el Desarrollo Educativo or PRONADE)

Description of the Program

The PRONADE schools represent a new community-based strategy to provide pre-school and elementary education in the rural areas, especially those which are the poorest and most isolated. Most of the communities are indigenous or Mayan language speaking communities. A World Bank loan, effective in 1998, financed an expansion of this program.

The program gives communities control over their schools. There are four levels of responsible parties:

- PRONADE at the central level in Guatemala City provides resources to the communities.
- Regional offices of the Ministry of Education coordinate with other departments of the Ministry.
- Local non-governmental organizations train community members.

- Parental committees, composed of elected members of the community, are responsible for administering school funds (about $4,000 a year), assisting teachers and students, and providing or distributing basic "inputs" to schools. This entails choosing teachers who know the language of the community, paying their salaries, and buying some school supplies.

Status Now

PRONADE now has 3,000 schools with 315,000 students and 11,000 teachers. About 80 percent of the teachers come from the community and speak the local language. Since these teachers do not have to travel to school or leave the community to collect their pay, the schools in this program average 20 more days per year of instruction than do the other schools. A bilingual education specialist with over 10 years of experience with DIGEBI has recently been assigned to PRONADE to help the teachers use texts and methods developed in the bilingual program (Rubio, personal communication, 2001).

Other Innovative Programs

Guatemala is benefiting from other innovative programs in bilingual education. Two of these are *Programa de apoyo al sector educativo en Guatemala (PROASE)* (Program to Support Education Reform) and the *Proyecto de Educación Maya Bilingüe Intercultural (PEMBI)* (Project for Mayan Bilingual and Intercultural Education).

With funds from the European Union and the Government of Guatemala, PROASE operates in three departments: Alta Verapaz, Baja Verapaz, and Izabal. Activities include curriculum adjustment in the teacher training colleges, assistance in education management, literacy and vocational training for adults, and local and regional improvements in infrastructure (PROASE, 2001).

With funds from the Government of Guatemala and German Technical Assistance (GTZ), PEMBI operates in the departments of Mazatenango, Quetzaltenango, Retalhuleu, San Marcos, Solola, and Totonicapan. It works with four private teacher's colleges, 12 laboratory schools associated with the teacher's colleges, 40 professors, almost 400 teacher's college students, and about 2,500 students in the primary schools. It also works with associations of parents and Mayan community members, and local and regional education authorities. Activities include designing curriculum for training bilingual intercultural teachers, training teachers at the teacher's colleges and at the laboratory primary schools, promoting parent involvement, and promoting discussion throughout the departments on the Education Reform (PEMBI, 2001).

Indonesia

Country Data

Population (2001): 207 million

Linguistic and Ethnic Groups as Percentages of the Population

Approximately 75 percent of the ethnic/linguistic groups in Indonesia belong to one of the following four groups: Javanese, Sundanese, Madurese, and Malay. Of the 726 living languages, 82 percent are languages that have speakers of one million or more. There are some 54 smaller ethnic groups/languages, many with less than 100,000 speakers, the majority of them being in Irian Jaya, Muluku, and Sulawesi. The major languages are Austronesian; the other languages are Papuan and found in parts of Timor, Irian Jaya and Halmahera (North Moluccas).

Indonesian:	8 percent (68 percent second language users)
Javanese:	37 percent
Sunda (Sundanese):	14 percent
Madura (Madurese):	7 percent
Malay:	5 percent (in Sulawesi used as a second language)
Batak (all varieties):	3 percent
Bali (Balinese):	2 percent
Bugis (Buginese):	2 percent
Makasar (Macassarese):	2 percent
Aceh (Achinese):	1 percent
Betawi (Jakarta Malay):	1 percent
Other:	about 18 percent

Language Policy

Bahasa Indonesia (or simply Indonesian) is the official language of the country. A modified form of Malay, Bahasa Indonesia was adopted by nationalists in 1928 and became a symbol of national unity during the struggle for independence (1945-50). Now over 100 million Indonesians use it as a primary or secondary language. English is used as the international language (Library of Congress website, 2000).

Role of Language in Education

Indonesian is the language of instruction, but 20 percent of the school week can be taught with a locally-constructed curriculum, called "Muatan Lokal," or "made locally." This period may include language, arts, local culture, and skills. Although the government passed the law permitting this in the late 1980s, not many schools take advantage of it because it is difficult to develop and publish new curricula. Other languages can be added as subjects beginning at elementary Class (Grade) 3.

English begins at that time, and continues as a subject in each class (grade) after that. The nine largest language groups have curricula available that can be taught as subjects, but they are rarely used as media of instruction.

Literacy Rate (1995-1999)

Male: 90 percent
Female: 78 percent

Net Primary School Enrollment Ratio (1990-1997)

Male: 97 percent
Female: 93 percent

Education is supposed to be universal and free, at least through the first 6 years of primary schooling.

Percentage of Primary School Entrants who Reach Grade 5 (1995-1999)

85 percent

Gross Secondary School Enrollment Ratio (1995-1997)

Male: 55 percent
Female: 48 percent

Innovative Programs: Mother Tongue Biliteracy Programs SIL (Summer Institute of Linguistics) International Programs

Description of the Programs

SIL International is working in several provinces with some of the smaller language groups to develop written local languages and assist the government with community development and education projects.

Province of Irian Jaya: There are some bilingual education programs in the Irarutu, Tehit, Sentani, Yawa, Orya and Walak language areas. At present, SIL International is in the introductory stages of creating the curriculum. It begins with individualized primers in the local languages, usually two to four primers in a big book format, and is followed by a series of bilingual folk tales written by the local people in a writers' workshop. This is then followed by a standardized Muatan Lokal series, which is just a series of easy reading books. The Muatan Lokal series includes a teacher's guide, while the primers have the teacher's directions printed in small letters in the big books. The whole series is coupled with flash cards to help in developing games for reading. SIL International staff have done some teacher training, but a more intensive program was scheduled to begin in the fall of 2000.

Province of Maluku: In 1995 an SIL International team began a mother tongue preschool program which has been very effective. Its multi-strategy approach uses easy-reading literature along with direct instruction in reading and writing the already known oral language. Graduates from that school enter Class (Grade) 3 elementary and do well with Indonesian as the new medium of instruction.

Maluku educators have a growing desire for education in the local languages, as an add-on, biliterate approach during the Mutuan Lokal slot. Two language groups, the Alune and Fordata, have successfully adopted this approach. The Galela, Sawai, and Yamdena language groups are planning to expand to include mother tongue education curriculum as soon as conditions allow.

SIL International has trained teams of Indonesians in Maluku who have worked with bilingual village leaders already trained in Bahasa Indonesia to help them become biliterate through a village-level training program called Biliteracy through Literature. The trained staff then train local residents to develop diglot (bilingual) literature and run their own programs. Several villages have built and stocked local village libraries with financial assistance generated through SIL International resources.

Mali

Country Data

Population (2001): 11 million

Linguistic Groups as Percentages of the Population

*Fulfulde:	9 percent
*Maninkakan:	8 percent
*Soninke:	6 percent
*Songhay:	5 percent
*Mamara (Senoufo):	5 - 8 percent
*Dogoso (Dogon):	4 percent
Supyire (Senoufo):	1 percent
*Barmanankan: (Bambara)	3 percent
*Tamasheq:	2 percent
*Bozo:	2 percent
Tamajaq:	2 percent
*Syenara (Senoufo):	1 percent
*Hasanya (Arabic):	1 percent
*Xaasongaxango:	1 percent
*Bonu:	less than 1 percent
Pulaar:	less than 1 percent
*French:	small number of first language speakers, but spoken by 15 percent of the population as a second language

*national language

Language Policy

French is the official language of the country and is the language of instruction even though it is spoken by only 15 percent of the population. There are 13 other national languages (noted above with an asterisk).

Role of Language in Education

The Malian government has committed itself to developing bilingual education materials and programs in 13 languages (SIL International, 2000).

Literacy Rate (1995-1999)

Male:	48 percent
Female:	12 percent

Net Primary School Enrollment Ratio (1995-1999)

Male:	47 percent
Female:	33 percent

Percentage of Primary School Entrants who Reach Grade 5 (1995-1999)

84 percent

Gross Secondary School Enrollment Ratio (1995-1997)

Male:	14 percent
Female:	7 percent

Innovative Program: Convergent Pedagogy Classes

Note: Penelope Bender, doctoral candidate at Michigan State University and formerly education specialist, Africa Region, the World Bank contributed this section in 2001. She is writing her doctoral thesis on education policy in Mali.

Description of the Program

Mali's first convergent pedagogy classrooms opened in 1987. Today, 16 percent of schools house over 1,000 convergent pedagogy classrooms and over 50,000 students are enrolled in the program. Eight national languages are used. Students are outscoring students in traditional classrooms on the primary school leaving exam. In Bamako, for example, 76 percent of convergent pedagogy students passed the exam, versus only 57 percent of students in traditional classes.

The Malian government describes the goals of convergent pedagogy as follows: To increase the perceived value of Mali's national languages, to preserve Malian culture, to increase access to education, to integrate schools and their environments, to develop bilingual students, to increase student learning in primary school, and to produce citizens capable of transforming Malian society while respecting its values (*Ministère de l'Education de Base*, 1998).

As described by the *Institut national de pedagogie*, convergent pedagogy is based on four general principles.

- A pedagogy of learning: Allowing the learner to find her/his own path to learning, supported by a teacher/facilitator, allowing the learner to test multiple routes in order to stimulate all of her/his talents, supporting all of the resources of the learner's personality, and increasing the learner's power to create.

- A pedagogy based on the learner and on the learner's life and environment: Taking into account the learning that the child has gained from her/his family and using the knowledge of the world in which the child lives to make sense of new learning.
- A differentiated pedagogy: Using a variety of learning strategies and methods to allow each learner within the heterogeneous group to attain, on different paths, common objectives.
- A project-oriented pedagogy based on the learner and learning, used as a motivation for teaching, and as a way of applying and retaining knowledge (translated from the French and summarized).

The reform requires changes in four major areas: language of instruction, the role of teachers, the view of knowledge, and learning and access to schooling.

History

In 1962, following independence, Malian educators began linguistic research on the country's languages, with the aim of eventually using them in adult literacy programs and formal schooling. In 1965, the country decided, based on the themes of a global post-colonial conference and the failure of adult literacy programs in French, to begin adult and adolescent literacy programs in national languages (*Ministère de l'Education de Base*, 1998).

From 1965 to 1978, Mali developed and ran adult literacy programs in the country's eleven major national languages. In 1978, a national conference was conducted to discuss the future of the formal (grades 1-12) education system. Based on the success of the adult literacy programs and the high dropout rates and low perceived levels of learning and exam pass rates in the primary school system, it was decided to experiment with the use of national languages in the primary grades (1-6). In 1979, four experimental Bamanankan classes opened in Segou, in central Mali. Classes in three other languages opened in 1982. Initial evaluations showed that these schools improved student learning outcomes in math and language (*Ministère de l'Education de Base*, 1998) and decreased dropout rates.

There were some problems with the program. Evaluations of teaching practice in the first generation of experimental schools reported problems stemming from the use of traditional teaching strategies in the experimental classes. It was found that these methods did not take into account the linguistic competencies of students in their first languages; students were being taught in their first languages as they had been taught in French. Also, students were having difficulty with the transition to French at the end of primary school, when they had to take the school leaving exam (*Ministère de l'Education de Base*, 1998). In the mid-1980s, Malian educators started to revise the national language program.

In 1985, a Malian team in Belgium for training happened to meet a professor at a Belgian university who was working with the Belgian and French governments to develop a method of teaching second languages in the primary grades. The Malians were interested in his approach, which called for the development of literacy in students' first language before transitioning to the second language and an insistence on oral proficiency in the second language prior to beginning instruction in literacy. The professor agreed to work with the Malians, and together they developed the approach now known as convergent pedagogy (*Ministère de l'Education de Base*, 1998).

Language of Instruction

Convergent pedagogy calls for children's first language to be used during the first two years of schooling as both the medium of instruction and as a school subject. French is introduced orally during second grade, and the amount of time spent in French increases gradually during the third, fourth and fifth grades. When children reach sixth grade, instruction is primarily in French, allowing them to take the primary school leaving exam in French.

Role of Teachers

In addition to changes in language teaching, different teaching methods are used in convergent pedagogy classrooms, including small groups, student writing and response activities, interdisciplinary projects and traditional forms of learning such as story telling and drama. Reading instruction consists of student construction and reading of text, beginning with dictation to the teacher in the early grades. Traditional classrooms use a phonics-based approach, whereas in convergent pedagogy, a whole language only approach is mandated (Wambach, 1995). Word walls and student writing cover classroom walls, whereas the walls of traditional classrooms are bare and reading materials are limited to textbooks designed by French publishers. Students are evaluated in groups on group activities (Bender, 2000).

Relationships between teachers and students are relaxed and informal. Students are encouraged to visit teachers at home, to talk with them at recess and to express themselves in class. The program expects teachers to tell stories and to sing and dance in traditional ways with students in class, and to act as facilitators, not as transmitters of knowledge (Bender, 2000; *Ministère de l'Education de Base* 1998; Wambach, 1995).

View of Knowledge and Learning

In addition to the different approach to language of instruction, convergent pedagogy starts from the point of view that students come from different backgrounds and with different types of prior knowledge, so their programs of instruction should be individualized. Teachers are expected to carefully observe student activities, analyze them based on lesson objectives and give feedback to students (Wambach, 1995). Through this kind of observation, teachers are expected to design individualized instruction.

Another central tenet of convergent pedagogy is that instruction is to be based on the social context and life of the student. Students visit community members and sites such as farms, artisans' workshops and markets to conduct research on community history and traditions and current practices. Students read about the areas they investigate, using materials produced by teachers and other students. They write about their findings and construct and present performances describing them to other members of their working groups. They then present their information to their classmates, teachers, and occasionally groups of parents and community members. When students return home, they are expected to use the knowledge they gain at school in their family, social and cultural environments.

Increased Access to Schooling

Convergent pedagogy calls for students to be promoted through the primary grades in cohorts. There is to be no grade repetition unless children are absent for substantial parts of the school year. This translates to a repetition rate of less than 5 percent per year for students in convergent pedagogy classes, versus over 20 percent for students in traditional classes (*Ministère de l'Education de Base*, 1996-2000).

Results

Convergent pedagogy students finish the primary school cycle in greater numbers than traditional students, and their pass rates on the primary school leaving exam are significantly higher than those of traditional students (Bender, 2000; *Ministère de l'Education de Base*, 1987-1999). Ministry studies have found that convergent pedagogy students have an increased interest in learning, are more intuitive and creative and take risks more readily. Their oral communication skills improve and they learn French "easily." The study suggests that student behavior changes in school carry over to their behavior in their families, with students suggesting problem solving approaches to their elders (*Ministère de l'Education de Base*, 1998). Former convergent pedagogy students who enter secondary school are pressing secondary schools to revise their curricula, as they are much more advanced in language, mathematics and science at entry than students entering secondary school from the traditional primary school program (Bender, 2000).

Obstacles to Reform

Despite these results, convergent pedagogy is expanding very slowly. As mentioned above, it is now being implemented in fewer than 20 percent of classrooms, thirteen years after the first class opened. The program has limited government support outside the small group of educators actively involved in developing and supporting it, and it has faced hostile reactions from administrative personnel, teachers and parents. There has been some effort to organize against the program in Bamako, the capital, and Koulikoro, one of the early sites. The superintendent of Bamako spoke of the concerns of different groups:

> *Parents see French as a door to success and development. Teachers reinforce this because they are worried about the lack of materials and exams, and also because they have lived through decades of experiments without seeing substantial change. System administrators have their own problems with convergent pedagogy, due mainly to a lack of materials and unclear administrative responsibilities. They tend to be in favor of the use of national languages for cultural reasons, but that is not sufficient to convince them unless they are certain that the use of national languages will improve the learning of French (Bender, 2000).*

Convergent pedagogy's financial resources have been extremely constrained; the government allocates limited funds to the program. It has functioned thus far on small grants from donors, computers borrowed haphazardly from multiple sources, and groups of education personnel who come together once or twice a year to write textbooks and provide professional development to teachers. This may change over the next few years, as a large sectoral expenditure program including extensive support for convergent pedagogy has recently been approved by Mali's key donors, including the World Bank.

Innovative Program: Community Schools, Save the Children Model

Note: Most of the information below came from telephone conversations with Fred Wood, Director of Education for Save the Children, in December, 1999 and June, 2001.

Description of the Program/ History

To respond to the growing demand for education, particularly among poorer and rural populations, the Ministry of Education, U.S. A.I.D., and other organizations explored ways of responding to these populations' diverse needs. One model that emerged was the community school, a non-governmental school supported by the community.

Several types of community schools were developed. One offered the traditional curriculum through French. Another offered a condensed version of the official curriculum in the local language. This second type became known as the Save the Children community school because of the international voluntary organization which received the grant to establish these schools.

The original plan was to give three or four years of schooling in the local language only. The curriculum was a condensed version of the national curriculum, with a focus on local needs such as agriculture and health. After this schooling, the students would become farmers, without going on to future education, and without having to learn French.

In 1992, Save the Children launched four village schools, financed in part by the U.S. A.I.D. project Basic Education Expansion Program (BEEP). The program began with Grades 1 through 4, later changed to 3. Class size was and is limited to 30 students per teacher, unlike other areas where there can be as many as 60 children in a classroom. The school calendar is flexible. Gender parity is a condition of village participation; in the first year the schedule was adjusted to two hours a day, six days a week to allow the girls time to help their mothers.

By 1996 there were 176 schools, serving 10,600 children, grades 1 through 3. Parents and others wanted the graduates of the community schools to continue four more years to the end of the primary cycle, a step that would phase in the teaching of French. In 1996, four schools began to add Grades 4 through 6, with the intention to extend through Grade 7 to complete the first cycle of primary education.

By 2001 there were about 800 such community schools, with about 55,000 children enrolled. About a quarter of the schools offered all seven primary grades.

For the lower grades, the curriculum continues to be the condensed version of the official curriculum. It uses the local language as language of instruction for Grades 1 through 3; the National Languages Unit of the National Pedagogical Institute (IPN) adapted the curriculum and translated it into the local language. French is introduced in Grade 3. For the upper elementary grades, the curriculum is the national curriculum.

Parents and community provide the labor for school construction and maintenance, using local materials. They pay some operating expenses and tuition fees (about $1.50 per student per seven-month school year). A school management committee composed of community members, two of whom must be literate, manages the budget, selects and pays teachers, oversees operations, and monitors student enrollment and attendance. In the past, payment for teachers' salaries came from parents or municipalities. Now the Ministry of Education has agreed in principle to use some of the World Bank loan to meet the cost of the teachers' salaries.

Teacher Professional Development

The teachers are villagers with some primary schooling or literacy training. This background contrasts with that of government teachers, who average 18 years of experience as well as lycée and pre-service training. Each teacher receives the equivalent of about $52 a year. Save the Children has provided technical supervision and support from "animators," who serve a dual role as development specialists and pedagogic advisors.

As an example of the training of the teachers, in the first year the teachers attended a four-week period of training led by Save the Children and IPN staff. Topics covered included basic pedagogy; methodology of teaching reading, writing, and calculating; and lesson planning. In the evenings, trainers and teachers discussed topics such as the importance of education, the role of the teacher in the village, classroom discipline, the importance of girls attending school, the role of the school committee, and so on.

Evaluation

Achievement. In 1996, through the Institute for Policy Reform, a United States non-governmental organization, Joshua Muskin conducted an evaluation of the project. Test results showed that the students in Grades 1 through 3 had attained better literacy skills than their peers in government-run schools and had done as well as those peers on the arithmetic test. Possible reasons for the better scores were mother tongue instruction, smaller class size, better curriculum, available instructional materials, intensive pedagogical support, and general sufficiency of resources.

There were several problems foreseen at the time of this 1996 evaluation with the move to expand instruction into the upper primary grades. It was feared that the poor mastery of French on the part of the village teachers would make it impossible to bring students' French ability to a suitable level. In addition, the very low salary level might jeopardize the sustainability of the project, with teachers frequently leaving for other jobs.

Costs. In 1999, Karen Tietjen of the Academy for Educational Development completed a comparative cost study in which the Community School, Save the Children model was compared with traditional government schools. The purpose of the study was to determine how feasible it would be for the government to sustain and expand community schools when donor funding was no longer available.

Tietjen concluded that the community schools were not as low cost as most people believed. The yearly per-student costs of the Save the Children community school was significantly higher at $54 per student than the government model at $42 per student. She reasoned that cost reductions realized by the lower salaries of the community school teachers were negated by the increased resources given for literacy training, teacher training, and pedagogical support. Further, the low cost construction models could end up costing more over time given their limited durability.

(Note: Wood questions Tietjen's conclusions, noting that she appears not to have factored in the cost of training a trained teacher, or the fact that in the traditional government schools in Mali there are almost no teaching/learning materials and very little in the way of supervision.)

The Tietjen study considered only cost, not cost effectiveness, although her report mentioned that the academic achievement of students in the Save the Children schools was superior to that of their counterparts in the government schools. Early results reported by Muskin, et al., and more recently by Save the Children, indicate that the Save the Children school students in grades 1 through 3 are attaining better literacy and numeracy skills more rapidly than their peers in government-run schools. These results are the consequence of several variables: smaller class size, better curriculum, available instructional materials, maternal language instruction, intensive pedagogical support, and a general sufficiency of resources. As yet, it is impossible to know the differential impact of the inputs (Tietjen, 1999, p. 79).

Student Examinations

Three waves of students have now finished Grade 7. Results are as follows:

1999	Students could not cope with French. 10 percent pass rate on the selection examination.
2000	Better results. 20 percent pass rate.
2001	Still better. Pass rate over 30 percent.

How do these numbers compare with those of the national French-medium schools? According to Wood, the Ministry has claimed that these schools have a 50 percent pass rate.

Mexico

Country Data

Population (2001): 97 million

Ethnic Groups as Percentages of the Population

Meztizos: (Indian and Spanish)	60 percent
Amerindian:	30 percent
Those of European descent:	approximately 9 percent
Other:	approximately 1 percent

Language Policy

The official language of Mexico is Spanish. About 88 percent of the population speak it as a first language. About 8 percent of the indigenous population are monolingual and speak one of the Mexican languages. Of these, the largest number of speakers are in the Nahuatl groups, followed by speakers of Maya and the Mixtecan language varieties.

Role of Language in Education

In the school year 1998-1999, more than a million indigenous youngsters received bilingual education in their first language and in Spanish. This instruction represented 49 languages in more than 17,000 schools and within 24 states of the country (Secretary of Public Education, 2000).

Literacy Rate (1995-1999)

Male:	92 percent
Female:	87 percent

Net Primary School Enrollment Ratio (1995-1999)

Male:	100 percent
Female:	100 percent

Primary education is mandatory and is offered in a variety of models: general, bilingual-bicultural, community (non-formal) education, and for adults.

Percentage of Primary School Entrants who Reach Grade 5 (1995-1999)

85 percent

Gross Secondary School Enrollment Ratio (1995-1997)

Male:	64 percent
Female:	64 percent

As of 1993, secondary school also was instituted as mandatory, with offerings including general, vocational education, distance education, technical education, and adult education.

Innovative Programs: Primary Education Project and Second Primary Education Project

Description of the Programs

Two recent World Bank-assisted projects have addressed the education needs of the indigenous population: the Primary Education Project (1991-1996) and the Second Primary Education Project (1995-1999). The first project had two components: improvement of educational services and institutional strengthening. It focused on Oaxaca, Guerrero, Chiapas, and Hidalgo, the four states with the highest incidence of poverty and the lowest education indicators. The second project extended the work of the first to ten additional states. It had three components: human resources development, educational material resources, and institutional strengthening.

Materials

The first project published readers, workbooks, and teachers' guides for 300,000 indigenous school children in grades 1-4 who spoke seven indigenous languages. Development of the books involved a close dialogue with indigenous leaders, teachers, scholars, and parents. The second project was to have developed about 300,000 books in 17 languages for students in grades 1-6.

As of 1997, the publication of materials had reached a stalemate. The many organizations involved with native language education could not reach agreement about curriculum. Some said it should be a special curriculum, while others wanted a modified general curriculum. They disagreed about dialect variation, saying that instead of about 60 language groups, it was closer to 500, implying that each would require its own textbook series. They disagreed about the purpose of education. Some said that the purpose is to preserve culture; others insisted that cultural preservation is not the business of education.

Teacher Professional Development

The first project trained every indigenous teacher in the four states for one week each summer. It also provided distance education via radio for those teachers in seven languages. The second project extended this training to the additional 10 states, and the additional 17 languages.

Status

The current status of the programs is not known. The project ended in 1999, but the team working on this report was unable to clarify whether or not the project had ended without doing what it was supposed to do.

Additional Information

The report of the Secretary of Public Education (2000) stated that special emphasis had been placed on the production of free textbooks in indigenous languages, texts that were written by the bilingual teachers with the support of the communities. In 1998, the educators revised and republished texts in the indigenous languages for Grades 1 and 2 of primary education, and developed eight new titles for Grades 3 and 4. In total, more than a million books were developed in 33 indigenous languages, with 52 dialect variants.

From what we have been able to learn, it would appear that in recent years the Government of Mexico has shown little interest in encouraging bilingual education (a multinational official speaking off the record). There are some indications of renewed effort, however. A law pending in Parliament now would grant linguistic rights for indigenous peoples (Hernandez, 2001).

Outside of the government others are struggling to promote indigenous education. The Coalición de Maestros y Promotores Indígenas de Oaxaca (*Coalition of Indigenous Teachers and Paraprofessionals of Oaxaca*) (CMPIO) has fought for 27 years to improve indigenous education. In March 2001 it issued a call for all interested parties to reorient education and strengthen the indigenous languages and cultures. Its battle cry is "Por la liberación del indigena !" (Liberty for indigenous people!) (*Noticias*, 2001).

Namibia

Country Data

Population (1999): 2 million

Ethnic Groups as Percentages of the Population (with languages spoken)

Ovambo: 50 percent (Oshindonga, Oshikwanyama)
Kavangos: 9 percent (Rukwangali, Mbukushu, Rugciriku)
Herero: 7 percent (Otjiherero)
Damara: 7 percent (Khoekhoegowab)
Nama: 5 percent (Khoekhoegowab)
Caprivian: 4 percent (Subiya, Mafwe, Shieyi, Totela, Silozi) (language of wider communication)
San: 3 percent (Vasekela Bushman, Kxoe, !Kung, Ju/'hoan, Hai//om, =/Kx'au//'ein, 'Akhoe, !Xoo)
Baster: 2 percent (Afrikaans)
Tswana: less than 1 percent (Setswana)

The remaining 13 percent of the population is made up of mother-tongue Afrikaans speakers, that is, Afrikaners and Coloureds.

Language Policy

Namibia's policy establishes English as the sole official language and gives equal status to all national languages, including Afrikaans. Afrikaans remains the language of wider communication in much of the country, especially the South.

Roles of Language in Education

Mother tongue instruction is provided from grades 1 to 3, and English from grade 4 onwards. School boards select the language of instruction for school from among 11 national languages. Learners continue the study of their mother tongue as a subject throughout the remainder of primary school, and as an optional examinable subject in secondary school.

Literacy Rate (1995-1999) (World Development Indicators, World Bank)

Male: 82 percent
Female: 80 percent

Net Primary School Enrollment Ratio (1995-1999)

Male: 84 percent
Female: 88 percent

Percentage of Primary School Entrants who Reach Grade 5 (1995-1999)

84 percent

Gross Secondary School Enrollment Ratio (1995-1997)

Male: 56 percent
Female: 66 percent

Innovative Program: Basic Education Strengthening Program

Description of the Program

The Basic Education Strengthening (BES) project (1996-1999) supported the Lower Primary Reform of 1995. Financed by U.S. A.I.D. and the government, its purpose was to improve the quality of primary education for Namibian learners in grades 1-4 in the historically underserved primary schools located in the northern region of the country. It undertook to implement a new grade 1-4 instructional program in mathematics, environmental studies, and local language literacy in four years.

Materials

The project aimed to produce teaching/learning materials that would supplement new textbooks being distributed to the primary schools, with the government texts distributed in 1996 to grade 1. BES materials consisted of highly programmed posters for the teacher to use with the class and lesson books for the students. Called Systematically-Designed, Structured Instructional Materials (SIMS), the posters present the material through incremental learning steps. In the detailed lesson plans printed on the posters, each step is spelled out for the teachers. This approach has been effective in other countries with few resources and poorly trained teachers.

The project translated the materials (posters and lesson books) into five local languages, Oshindonga, Oshikwanyama, Rukwangali, Mbukushu, and Silozi, for four subjects in grades 1 through 3. [Silozi is not the mother tongue of most people who live in Caprivia, the narrow strip of land in the northeast. Caprivians speak one of four other languages. Silozi has been adopted by these groups as a language of wider communication.]

For grade 1, teachers removed from their classes did the translating. This pull-out method for translating was unsustainable because the time allotted was insufficient and teachers were needed in their classrooms. For subsequent grades, hired translators and college student translators worked with the Language Coordinator for the particular language to produce the materials. In addition, the translators produced a 20-module Teacher's Basic Competencies Manual in four languages. The materials reached over 500 schools, 2,000 teachers, and 65,000 learners.

Translation into local languages was more difficult than anticipated. Lack of a stable orthography, regional variations in language use, and limited translation skills were some of the difficulties the project faced.

Teacher Professional Development

In-service teacher training accompanied the distribution of the SIMS material. At first, the teachers came for one to two weeks to a central location to participate in training delivered by SIMS facilitators. All training was carried out in the local languages except the initial training of facilitators, whose training was conducted in English. In the last year of the project, the teachers received intermittent training in locations closer to their homes. They received one day of training and left with SIMS materials to practice on with their classes. After two weeks, they returned for another day of training. Thereafter they were to share their experience with other teachers in nearby schools.

U.S. Peace Corps volunteers were available to support the teachers. During the four years of the project, over 80 volunteers served as on-site helpers. Each volunteer was responsible for a cluster of schools.

Evaluation

At the beginning of the year in grade 2, the project tested students in SIMS schools and in non-SIMS schools in mathematics, environmental studies, and English. SIMS classes performed better than non-SIMS classes in mathematics and environmental studies, but not in English (Note: the SIMS materials did not include English). The SIMS materials differed in approach from the more integrated, learner-centered approach reflected in the government-prepared tests and advocated in the teacher training institute. While the SIMS materials proved popular with teachers, including the well-trained teachers, the central education authorities considered them only an interim remedial program, one which was designed to show the groups in the north that the government was doing something for them after years of neglect.

According to the Namibia Education for All 2000 Assessment (UNESCO, 2000), this project "assisted the ministry...to develop structured teaching materials, for use by under-qualified teachers in transition to a more creative and learner-centered approach. The teachers using the materials were supported both in their teaching efforts and in their studies towards an elementary formal teaching qualification by volunteer teachers, each serving a cluster of schools."

Papua New Guinea

Country Data

Population (2001): 5 million

Linguistic and Ethnic Groups

Papua New Guinea is a Pacific island nation consisting of 600 islands with a population speaking more than 800 languages. Some are Austronesian and some are Papuan. Tok Pisin, a Melanesian pidgin based on English, is a lingua franca, particularly in the northern part of the country and in the capital. Hiri Motu, a trade language of the southern coast, is a lingua franca in that part of the country.

Language Policy

English, Tok Pisin and Hiri Motu are the official languages.

Role of Language in Education

Prior to and since independence in 1975, English has been the medium of instruction in formal education; vernacular languages and Tok Pisin were permitted in non-formal education. With the Education Reform of 1995, the policy is gradually shifting: Vernaculars and Tok Pisin are used in the first three years of education, called elementary school (preparatory, grade 1, and grade 2), and English thereafter in the primary (3-8) and the secondary (9-12) grades.

Literacy Rate (1995-1999)

Male: 81 percent
Female: 63 percent

Net Primary School Enrollment Ratio (1995-1999)

Male: 79 percent
Female: 67 percent

Percentage of Primary School Entrants who Reach Grade 5 (1995-1999)

60 percent

Gross Secondary School Enrollment Ratio (1995-1997)

Male: 17 percent
Female: 11 percent

Innovative Program: Viles Tok Ples Priskuls

Description of the Program

The first Christian missionaries to Papua New Guinea learned the local language and used it for evangelizing and teaching, often translating the Bible and other religious texts. With the introduction of formal education in the Australian colonial period, English became the medium of instruction, a policy which continued after Independence.

In 1980, the provincial government of the North Solomons, with the help of the University of Papua New Guinea Extension and SIL International, introduced the *Viles Tok Ples Priskul* (village vernacular preschool). The school came in response to parental demands for a relevant education for their children, one that would teach them village values and prevent the alienation of the children from village life, culture, language and identity. The preschool enrolled children 6 to 8 years of age in a non-formal program in the local language, preparatory to formal primary school taught in English.

The movement spread throughout the province and to other areas, initiated by missions, other non-governmental organizations working with communities, and the provisional governments. The exact number of these schools is not known. In a 1993 report to UNICEF, researchers from the National Research Institute of Papua New Guinea stated that they had found some 3,500 local *Tok Ples* preschool classes, enrolling about 30,000 children (Ahai & Bopp, 1993). At the end of 1993, according to statistics quoted in an SIL International survey, more than 220 languages had *Tok Ples* preschools with more than 3,000 teachers and 48,000 students. In 1995, a second SIL International survey indicated that children representing about half of the population had access to vernacular education projects (SIL International, 1995).

Materials

Materials development for the *Tok Ples Priskuls* varies with the technical assistance given to the local group. For the SIL International programs, materials production for the vernacular language classes is based on the assumptions that reading materials should affirm local languages and cultures; that they should be relevant to the interests, needs and goals of the readers; and that they should promote readers' identity as active participants in the life and development of their community and nation (Malone, 1995).

Local people write original stories in their own language. The stories may include traditional stories, legends, songs, and poetry. Local writers translate or adapt materials originating outside their communities to make the materials appropriate to the local cultural and linguistic context. Many of these translated or adapted materials are used in the Shell Project initiated by SIL International in 1988. At the national or provincial level, language workers develop stories or articles which they produce in a "shell" format: illustrations in place, margins set, and pages ordered and numbered. Local language teams then adapt and translate the prototype materials into their local language. They enter the translated texts onto the pre-formatted shell and print them in limited quantities for testing and revision, or onto stencils for duplication on silkscreen printers or hand-operated duplicators in community materials production centers. The Shell Project has produced hundreds of materials such as "Big Books" for group reading, smaller books for individual readers, posters, and even games. In recent years, funding from the Japanese government has led to establishment of desktop publishing centers in the provincial education offices.

Teacher Professional Development

Over 100 Papua New Guinean organizations provide some sort of training related to literacy and awareness. They include the provincial literacy offices, SIL International, the Lutheran Church, the United Church, the East Sepik Council of Women, the Goroka YWCA, the Idea Centre, the PNG Trust, and the University of Papua New Guinea. Duration and content of training varies with each group. The communities choose the teachers, who must know the vernacular of the community.

Evaluation

In a 1993 report to UNICEF, evaluators wrote that

> *Tok Ples Skuls are an obvious success story. ... It has been observed that Tok Ples Skul "graduates" uniformly do much better in the formal system than their counterparts who did not attend Tok Ples Skuls. Also, children come out of Tok Ples Skuls with an enhanced ability to function in their own language and with an appreciation of their own culture; something parents found was systematically undermined by the National Community School system (Ahai & Bopp, 1993, p. 57).*

In 1995, in a paper presented to staff at the World Bank, SIL International literacy specialist Susan Malone stated,

> *Although no comprehensive evaluation of the impact of the mother tongue effort on either children or adults has yet been conducted, the effort can be judged successful because it has continued to expand and has given rise to the government's decision to restructure the entire education system to include, for the first time ever, a three-year mother tongue component (Malone, 1995).*

Innovative Program: Education Reform

Description of the Program

In 1992, with the success of the *Tok Ples* schools, the National Department of Education formally proposed restructuring of the formal education system, creating a hamlet-based school for the first three years (preparatory and grades 1 and 2) in the local language, with bridging to English in the second half of grade 2. A school using English and more centrally located would follow for the remaining primary grades (3 through 8), with some provision for the local language in grades 3, 4, and 5. The first three years would be called Elementary School and the remaining six years Primary School. The existing community schools would be transformed into Primary Schools by losing grades 1 and 2 and by being "topped up" by the addition of grades 7 and 8. Financing the additional teachers in the higher grades would be possible because of savings on salaries for teachers in the first three years, who would be village leaders and not the more expensive credentialed teachers in the higher grades.

In 1993, three provinces began implementing the reform: New Ireland, East New Britain, and Milne Bay. In 1995, the Education Reform became official government policy. At present, all provinces have begun to implement the reform, phased in gradually as materials are developed for as-yet-unwritten languages, as teachers are trained, and as communities build facilities for the Elementary Schools. The old (English only) system continues wherever the new system has not yet been introduced.

Teacher Professional Development

The Department of Education has two levels of training: training of teacher trainers at the national level, and training of teachers at the district level by teacher trainers who have been trained at the national level.

Participants in the train-the-trainer course are high school graduates with two years of teacher training college and some teaching experience. They receive a total of 24 weeks of training before they assume responsibility for teacher training in their assigned districts. Courses include reading and writing the local language, a holistic approach to teaching language, practice teaching, lesson planning and scheduling, materials production, classroom management, student assessment, and record keeping.

Participants in the teacher training course are candidates chosen by the community. They are either persons with a grade 10 education, but not necessarily any teaching experience, or experienced primary school teachers who are used to teaching in English only programs and are making a switch to teaching in the local language. The latter group consists primarily of retirees seeking to supplement their pensions. Teacher training participants receive a total of nine weeks of training. In addition, they must complete a self-instruction distance learning unit. The course content is similar to that taught to the teacher trainers.

Surveys and Reviews

In 1994, SIL International undertook a review entitled *A Survey of Vernacular Education Programming at the Provincial Level within Papua New Guinea* to assess the situation at the start of the Elementary Education Reform, including community attitudes, provincial implementation plans, if any, and perceived problems. Teams interviewed representatives from 19 of the 20 provinces and visited 13 provinces. They found that, of the 800-plus languages, more than 350, or 44 percent, had an existing written code. Furthermore, because some of the languages had many speakers, almost 90 percent of the population had an orthography in their languages. Literacy material was available for over 250 languages, of which 170 had vernacular education programs (SIL International, 1995).

The survey teams found that provincial education authorities were aware of the reform, and most planned to implement it. The trials in New Ireland, East New Britain, and Milne Bay had run into problems of materials, teachers, and scheduling, but the communities were not concerned about the difficulties. The teams learned that communities were not necessarily attracted to the vernacular education concept because of its pedagogical value. More important to them was the value of the program for building strong relationships and links with the language, culture, and values of the home community – something that had not happened with the traditional, Western-oriented community school in which English was the medium of instruction.

The teams noted much confusion and many questions about implementation: (1) Who is responsible for the new elementary program – the community and non-formal education structures (as with the Tok Ples Priskul) or the formal authorities? (2) If it is the formal education authorities, representing national interests, would that kill the community feeling that had been responsible for the rapid growth of the Tok Ples Priskuls? (3) What would happen to the existing Tok Ples Priskuls? Would they merge with the new structure or remain apart? (4) While the curriculum for the preparatory year is well understood, what would be the curriculum for the vernacular education in grades 1 and 2? (5) If village teachers were hired, would they have the necessary English to bridge to English in the second half of grade 2?

In 1998, the World Bank and AusAID conducted an Education Sector Review which concluded that the Education Reform was on track. The communities and parents were supportive of the Reform, mainly for the cultural reasons cited in the earlier SIL International survey.

During the period 1995-1999, the then World Bank task manager for education in Papua New Guinea visited schools in about half the provinces of the country. Teachers at the grass-roots level reported that children were successfully learning to read and write their mother tongues and then could successfully use the word-attack strategies to decode and learn English. Moreover, they were more proactive about learning than their peers in English only schools, asked more questions, and appeared much more at ease than their predecessors, who were confused and frightened when confronted with a medium of instruction they did not understand.

Status Now

According to the former World Bank task manager, all 20 provinces are implementing the Reform based on their Provincial Education Development Plans. At the end of 2000 some 380 language groups were participating, with plans to add 90 more in 2001. The original idea was to start in 1995 and finish in 2004. The Department of Education is now suggesting that the introduction of the Reform may take somewhat longer than expected.

Philippines

Country Data

Population (2001): 74 million

Ethnic and Religious Groups as Percentages of the Population

Christian Malay: 91 percent
Muslim Malay: 4 percent
Chinese: 2 percent
Other: 3 percent

Linguistic Groups as Percentages of the Population

Tagalog: 24 percent
Cebuano: 24 percent
Ilokano: 11 percent
Hiligaynon: 10 percent
Waray-Waray: 5 percent
Pampangan: 3 percent
Pangasinan: 2 percent
Magindanaon: 2 percent
Ibanag: less than 1 percent
Masbatenyo: less than 1 percent
Other: 17 percent

Language Policy

The official languages of the Philippines are English and Filipino (a synthetic language based mainly on Tagalog, the language spoken in Metro Manila, with elements from other Philippine languages). Both are used for communication as well as instruction. Regional languages are considered auxiliary official languages, and Spanish and Arabic are promoted as "voluntary" languages.

Role of Language in Education

Since 1974, the government has promoted a bilingual education policy: English for science and math, and Filipino for everything else. In the early grades, teachers can use the local vernaculars, but there has been little government support for such local vernacular programs. In June, 1999, the Department of Education, Culture, and Sports began an experimental program using the three major Philippine languages, Cebuano, Ilokano, and Tagalog, as official languages of instruction. The intention of the program is to increase proficiency in Filipino and English by using these regional languages as a bridge. However, a high proportion of children enter school with no knowledge of these three regional languages.

Literacy Rate (1995-1999)

Male: 94 percent
Female: 94 percent

Net Primary School Enrollment Ratio (1995-1999)

Male: 98 percent
Female: 93 percent

Percentage of Primary School Entrants who Reach Grade 5 (1995-1999)

69 percent

Gross Secondary School Enrollment (1995-1997)

Male: 71 percent
Female: 75 percent

Innovative Program: First Language Component-Bridging Program (SIL International and other groups)

Description of the Program

This is a pilot project on transitional, multilingual education in the Province of Ilfugao in the north. The Supervisor of the Hungduan District Department of Education, Culture and Sports (DECS) and some SIL International linguists initiated this pilot in 1985. The project lasted for six years. We do not know the current status.

Pilot programs approved by the DECS currently exist in Nueva Vizcaya, Isabela and Kalinga-Apayao provinces. Similar activity is taking place in Kalinga, Palawan, and Mountain provinces as well. Until recently, such programs had not been adopted by the DECS as an official strategy.

Innovative Program: Third Elementary Education Project (World Bank)

Description of the Program

Since 1965, the World Bank has assisted 11 education projects in the Philippines. To our knowledge, none of these projects has worked with the minority languages. The current elementary education project has a component which emphasizes school-level improvements in

26 poor provinces: textbooks, in-service teacher training, awards from a School Improvement and Innovation Facility (SIIF), construction and repair of classrooms and provision of furniture and equipment.

According to the Staff Appraisal Report of October 1996, an example of the use of the SIIF would be the "indigenization of material and curriculum and training of indigenous teachers to assist with the transition from the vernacular to the languages of instruction, and to promote culturally appropriate minority education" (World Bank, 1996).

The staff person in charge of this project at the World Bank office in Manila responded as follows to a question about the provision for mother tongue instruction: "There is no specific provision to do that at present. However, there is a school-specific special initiatives fund (the SIIF) which could include such assistance if identified and proposed for assistance by schools." In other words, no one at the World Bank or within the Ministry of Education had been pushing hard for the incorporation of minority languages and culture within the formal education system. This may change soon. A World Bank senior educator who works on the Philippines sent us a message that a joint World Bank-Asian Development Bank study of the education sector will recommend that the government revisit the case of vernacular education.

Innovative Program: Adult Literacy Programs (Translators' Association of the Philippines, affiliated with SIL International)

There are scattered vernacular-language literacy programs throughout the country. We learned of the following:

- Bukidnon province: Basic literacy integrated with health activities. The language is Binukid, with an estimated 150,000 speakers.
- Cotabato Province and Sultan Kudarat in Mindanao: Basic literacy and health promotion. The language is Cotabato Manobo, with an estimated 15,000 speakers.
- Davao del Norte: Basic literacy instruction for women, but the women requested that their children be taught instead. There is now a plan to start mother tongue education among preschool children.
- Dinalupihan, Bataan, Central Luzon: Basic literacy instruction and income-generating projects. The language is Ayta Ambala, with an estimated 3,500 semi-nomadic speakers.
- Kalinga, Northern Luzon: Basic literacy instruction. The language is Butbut Kalinga, with an estimated 15,000 speakers.
- Zamboanga del Norte: Basic literacy. The language is Central Subanen, with an estimated 40,000 speakers.
- Zamboanga Peninsula (tip): Basic literacy, integrated with health activities. The language is Western Subanon, with an estimated 80,000 speakers.
- Zamboanga del Norte (northern portion): Health education. Basic literacy being done by another non-governmental organization. The language is Northern Subanon, with 10,000 speakers.

Vietnam

Country Data

Population (2001): 78 million

Linguistic and Ethnic Groups as Percentages of the Population

There are 54 officially recognized ethnic communities. Ethnic minorities, speaking one of 53 languages, make up over 13 percent of the population.

Language Policy

The national language is Vietnamese or Kinh, spoken by about 87 percent of the population.

Literacy Rate (1995-1999)

Male:	95 percent
Female:	88 percent

Net Primary School Enrollment Ratio (1995-1999)

Male:	95 percent
Female:	94 percent

Percentage of Primary School Entrants who Reach Grade 5

78 percent

Gross Secondary School Enrollment Ratio (1995-1997)

Male:	44 percent
Female:	41 percent

Innovative Program: Primary Education Project (UNICEF)

Description of the Program

The purpose of the program is to provide primary education to disadvantaged children in the remote and mountainous areas as part of the government's commitment to universal primary education.

In 1991, the project began with emphasis on multigrade education to address problems of scattered settlements in remote areas, shortage of teachers, and shortage of classrooms. Project activities included development of curriculum, teacher training, development of cluster school networks, provision of supplies, and social mobilization. The project began in 20 schools in four provinces. By 1998 it included 1,187 schools in 37 provinces.

In 1996, the project added a bilingual component that incorporated a project for Khmer children and broadened the focus to address the needs of all ethnic minority children. The component was designed to support the 15 percent local curriculum component that allows the teaching of local language as a subject, while the other 85 percent goes for teaching only in the national language, Vietnamese. The government policy for ethnic minority language teaching is one of teaching the written language as a subject rather than introducing it as a medium for instruction at the onset of school.

Materials

In the previously established Khmer project, several teacher resource books were developed, mainly in Vietnamese because the teachers did not know Khmer. In the bilingual component the project has developed and produced 21 bilingual big books and 12 workbooks in 4 languages (Khmer, Bahnar, Cham, and Hmong).

Teacher Professional Development

Teacher training includes in-service training at cluster school networks, pre-service training in teacher's colleges and accelerated teacher training centers, and teacher training through district boarding schools as a source of recruitment of ethnic minority students for teacher training. There is a shortage of teachers, especially teachers who speak minority languages and who will teach in the remote and difficult areas. Training can be limited; Vietnamese-speaking students in one teacher's college received 10 days of instruction in the Khmer Basic Education course, to train them to teach in Khmer areas.

Evaluation

A 1998 evaluation by outside experts concluded that the project had achieved remarkable success in the multigrade component. Contributing to the success was the training of teachers and the full support by all education officials. The evaluation stated that

> *The way bilingual education is presently implemented in Vietnam goes against the bulk of research in education. Research around the world has shown that literacy skills are best acquired in the mother tongue and then transferred to the second language resulting in increased proficiency in both languages (UNICEF Vietnam, 1998, Executive Summary, p. 4).*

The evaluators made six recommendations:

1. Clarify the purpose of bilingual education: to improve the use of both languages by the learner.
2. Increase knowledge and awareness of the advantages of bilingual education among all stakeholders. Stress that there should be instruction in the mother tongue until children acquire enough Vietnamese to understand the subject content of the curriculum.

3. Continue to support development of good reading materials in minority languages, as well as local materials production. Involve the community in developing the content of the books.
4. Assist in design of orthography for those languages without scripts.
5. Support the development of a teacher training course for Vietnamese speaking teachers who are assigned to minority language areas. Include in the curriculum methods for second language teaching, as well as minority language study.
6. Develop a trial for bilingual education which would use the ethnic language as the medium of instruction to develop literacy first in the mother tongue and later in Vietnamese.

Status Now

In 1999, UNICEF Vietnam reported to UNICEF New York that the Primary Education Project had developed 71 bilingual books and that the project had organized teacher training in multi-grade teaching techniques, bilingual education, and girls' education, among other activities. The report stated that to encourage direct involvement by community and parents, UNICEF plans to initiate advocacy and mobilization strategies, training parents' associations and others in early childhood care, and emphasizing literacy, life skills and gender roles.

Innovative Program: Primary Education Project (World Bank)

(This project would appear to overlap with the UNICEF project, but where and in what ways is not clear, so we are treating the two projects separately.)

Description of the Program

According to the 1993 Staff Appraisal Report (World Bank, 1993), this World Bank-assisted project was intended to improve ethnic minority children's access to education, largely in the mountainous areas. Targeted minority language groups were Thai, Muong, Nung, Hmong, Harai, Bahnar, Cham, and Sedang, groups which comprise about half of the total ethnic population. Project activities were to include bilingual education, multigrade teaching, and the provision and repair of schools.

Representatives from UNICEF participated in project preparation to utilize UNICEF's experience in Vietnam and to coordinate the activities of the two agencies. Technical assistance was intended to support

- multi-grade teaching;
- study of ethnic minority languages and development of children's dictionaries;
- standardization of scripts for languages already written and development of writing systems for those that were not yet written;
- workshops for teachers in multigrade pedagogies, teaching of mother-tongue literacy, and teaching of Vietnamese as the national language;
- learning materials suitable for multigrade schools; and
- learning materials in the eight selected ethnic minority languages.

We do not know how much of this very ambitious plan has been carried out. In December, 1999, the education officer at the World Bank office in Hanoi, when asked about activities for ethnic minority children, replied that the project has a subcomponent which aims to ensure that ethnic minority children have access to high quality, relevant primary education. Some of the activities that have taken place so far include introduction of multigrade teaching practices, development of textbooks for eight selected ethnic minority languages, taught as subjects, and piloting the use of the minority language as a medium of instruction (planned to begin in 2000).

The education officer added that non-governmental agencies such as Oxfam UK, Save the Children UK, Save the Children Australia, and UNICEF were also supporting bilingual education in Vietnam.

According to a World Bank education specialist who worked developing the project from 1989 to 1993, when the project was approved, there were problems with the mountain areas/multigrade/ethnic minority language component from the beginning. It is possible that this component was not done as part of the World Bank-assisted project, but shifted to UNICEF as the Primary Education Project described above.

Annex B: Organizations

Multilateral Organizations

United Nations Educational, Scientific and Cultural Organization (UNESCO)

Address: 7, place de Fontenoy
75352 Paris 07 SP
France
Telephone: + 33-1-45-68-10-00
Fax: + 33-1-45-67-16-90
URL: http://www.unesco.org/

UNESCO is a United Nations organization whose main objective is to contribute to peace and security in the world by promoting collaboration among nations through education, science, culture, and communication. UNESCO's goal is to further universal respect for justice, for the rule of law, and for the human rights and fundamental freedoms which are affirmed for the peoples of the world, without distinction of race, sex, language, or religion, by the Charter of the United Nations.

United Nations Children's Fund (UNICEF)

Address: 333 East 38th Street - GC-6
New York, NY 10016
Telephone: (212) 686-5522
Fax: (212) 867-5991
URL: http://www.unicef.org/

UNICEF is mandated by the United Nations and is dedicated exclusively to children. Its mission is guided by the Convention on the Rights of the Child, which is the first legally binding international instrument to incorporate the full range of human rights – civil and political rights as well as economic, social and cultural rights. UNICEF works with other United Nations agencies, governments and non-governmental organizations to provide community-based services in primary health care, nutrition, basic education and safe water and sanitation to the developing world. Its programs also address children's and women's rights issues.

World Bank

Address: 1818 H Street, NW
Washington, DC 20433
Telephone: (202) 477-1234
URL: http://www.worldbank.org/

The World Bank Group includes four organizations: the International Bank for Reconstruction and Development (IBRD), International Development Association (IDA), International Finance Corporation (IFC), and the Multilateral Investment Guarantee Association (MIGA). The World Bank Group has 183 member states. Its goal is to reduce poverty and improve living standards by promoting sustainable growth and investment in people. To achieve this goal, the Bank lends money to its low- and middle-income member countries for development projects and provides technical assistance and policy guidance. It is the world leader in financing for education. From 1989 to 1996, the total external financing for education by both multilateral and bilateral organizations was around US$6 billion. The World Bank accounted for almost 30 percent of that total. Since 1990, about 30 percent of Bank lending for education has gone to primary education, 20 percent to secondary, and the remainder to other areas, including vocational, higher level, teacher training, and pre-primary. At a recent meeting in Washington, DC, Bank officials indicated that more attention is going to be paid to education issues in developing countries and that Education for All is one of the Institutional Development Goals (a handful of highest-priority institutional goals).

Bilateral Organizations

Australian Agency for International Development (AusAID)

Address: GPO Box 887
Canberra, ACT 2601
Australia
Telephone: +61-2-6206-4000
Fax: +61-2-6206-4880
URL: http://www.ausaid.gov.au/about/

AusAID is responsible for the management of the official Australian Government overseas aid program. Its priority sectors are health, education, infrastructure and environment (e.g., communications, energy, hazardous substances), rural development, and governance (e.g., human rights, private sector, trade & development). AusAID partners with other agencies in carrying programs or in responding to emergencies.

German Technical Cooperation Agency; Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)

Address: Dag-Hammarskjöld-Weg 1-5
65760 Eschborn
Germany
Telephone: +49-6196-79-0
Fax: +49-6196-79-1115
URL: http://www.gtz.de/home/english/

The GTZ is owned by the Federal Republic of Germany, but operates as a private sector enterprise in development. Its mission is to help make sustainable improvements to the living conditions of people in partner countries and to help conserve natural resources. In addition to working on behalf of various German ministries, it also supports programs in cooperation with such organizations as the European Union, the United Nations, and the World Bank. GTZ has programs in 142 countries worldwide. It is committed to encouraging mother tongue education, especially at the elementary school level.

Swedish International Development Agency (SIDA)

Address: Sveavägen 20
Stockholm, Sweden
Telephone: +46-8-698 50 00
Fax: +46-8-20 88 64
URL: http://www.sida.se/

SIDA coordinates and carries out cooperative development projects under the Ministry of Foreign Affairs. Its work is carried out through multilateral organizations, primarily through UN agencies, the World Bank and regional development banks. It is committed to six goals: economic growth; economic and political independence; economic and social equality; democratic development in society; long term, sustainable management of natural resources and protection of the environment; and gender equality. Projects generally fall in the areas of farming, health, trade, and research. Universal education is also a priority. The Swedish government supports basic education by channeling funds directly into developing countries' budgets rather than undertaking projects on its own.

United States Agency for International Development (U.S. A.I.D.)

Address: Information Center
Ronald Reagan Building
Washington, DC 20523-1000
Telephone: (202) 712-4810
Fax: (202) 216-3524
URL: http://www.info.usaid.gov/

U.S. A.I.D. implements US foreign economic and humanitarian assistance programs. It is an independent federal government agency that receives guidance from the Secretary of State and focuses on three principal areas: economic growth and agricultural development; global health; and conflict prevention and developmental relief. U.S. A.I.D. has working relationships with more than 3,500 US companies and over 300 US-based private voluntary organizations. Through its Center for Human Capacity Development, it supports educational efforts through field support, technical leadership, and research.

United States Peace Corps (Peace Corps)

Address: 1111 20th Street, NW
Washington, DC 20526
Telephone: 1-800-424-8580
URL: http://www.peacecorps.gov/home.html

The Peace Corps' goals are to help countries in meeting their need for trained men and women; to help promote a better understanding of US citizens; and to help promote a better understanding of other peoples by US citizens. Currently, there are over 7,000 volunteers serving in 77 countries, working *inter alia* on clean water projects, teaching children, helping start new small businesses, and stopping the spread of AIDS. Volunteers serve in their host countries for two years. The Peace Corps cooperates with other agencies on projects that fall within its mission.

Non-governmental Organizations

Academy for Educational Development (AED)

Address: 1825 Connecticut Avenue
Washington, DC 20009
Telephone: (202) 884-8000
Fax: (202) 884-8400
URL: http://www.aed.org

AED is an independent non-profit service organization that addresses development needs in the United States and throughout the world. Under contracts and grants, AED operates programs in collaboration with policy leaders, non-government community based organizations, businesses, government agencies, international multilateral and bilateral funders, schools and universities. Based in Washington, AED often maintains offices in the countries in which it works.

American Institutes for Research (AIR) Center for International Research

Address: 1815 North Fort Myer Drive
Arlington, VA 22209-1805
Telephone: (703) 527-5546
Fax: (202) 527-4661
URL: http://www.air.org/

AIR is a 54-year-old behavioral and social science research organization with experience conducting international and comparative education projects involving some 80 countries. The Center for International Research was established when the Institute for International Research (IIR) merged with AIR in 1996. AIR works with host countries under the auspices of international agencies such as U.S. A.I.D. on projects such as increased access to education for girls, improved student learning, curriculum development and teacher training, and education policy and planning.

Juárez and Associates, Inc.

Address: 1725 K Street, N.W.
(East Coast office) Suite 608
Washington, DC 20006
Telephone: (202) 331-7825
URL: http://www.juarezassociates/com/juarezdc

Juárez and Associates is a research and management consulting firm that specializes in working with its clients in meeting the needs of minority populations and underserved groups. The firm also focuses on projects that serve Hispanic and other hard-to-reach consumer markets. Its headquarters are located in Los Angeles with an office in Washington, DC. Juárez and Associates has been involved in projects in Guatemala through U.S. A.I.D.-funded projects.

Save the Children Federation

Address: 54 Wilton Road
Westport, CT 06880
Telephone: (203) 221-4000
Fax: (203) 227-5667
URL: http://www.savethechildren.org

Save the Children is a US-based non-governmental organization that has been active in maternal and child health, basic education, grassroots economic development, and natural resource management for over 60 years. Its projects can be found in all parts of the world, including the United States, and include both responses to children in crisis and as long-term projects. Many of these projects are coordinated with other international agencies. Save the Children has been a major contractor for education in Mali, working in the district of Kolondieba in southern Mali since 1987.

SIL International (formerly Summer Institute of Linguistics) (SIL)

Address: 7500 West Camp Wisdom Road
Dallas, TX 75236-5699
Telephone: (972) 708-7400
Fax: (972) 708-7433
URL: http://www.sil.org/

SIL is an international philanthropic and academic organization committed to linguistic research, language development, literacy, scripture translation and other projects of practical, social, and spiritual value to the lesser known cultural communities of the world. SIL typically makes its services available through cooperative agreements with governmental ministries, universities, and other relevant institutions. Its primary contribution lies in providing technical assistance through its members rather than financial assistance. In 1992, SIL was granted consultative status with UNESCO, and in 1997 it received special consultative status with the United Nations through the Economic and Social Council. In 1998, the organization was admitted as a network in formal consultative relations with UNESCO.

World Learning

Address: Kipling Road
P.O. Box 676
Brattleboro, VT 05302-0676
Telephone: (802) 257-7751
Fax: (802) 258-3248
URL: http://www.worldlearning.org/

Founded in 1932 as The U.S. Experiment in International Living, World Learning is a private, nonprofit international educational service organization. Its educational and training programs aim to enable individuals and institutions to develop the leadership capabilities and cross-cultural competence required to advance international understanding, work effectively in multicultural environments, and achieve sustainable development at the community level or on a national scale.

ANNEX C: References

Materials Consulted

Academy for Educational Development. (1997). *Guatemala Basic Education Strengthening Project (BEST), project final report*. Washington, DC.

Ahai, N., & Bopp, M. (1993). *Missing links: Literacy, awareness and development in Papua New Guinea*. Port Moresby: National Research Institute of Papua New Guinea.

Bender, P. (2000). Data and notes collected during practicum in Mali.

Boothe, K., & Walker, R. (1995). Mother tongue education in Ethiopia: Full speed ahead! Paper presented at the 1995 conference of the American Association of Applied Linguistics.

Candelaria-Greene, J. (1996). A paradigm for bilingual special education in the USA: Lessons from Kenya. *Bilingual Research Journal* 20, 545-564.

Cazden, C., Snow, C. E., &. Heise-Baigorria, C. (1990). *Language planning in preschool education with annotated bibliography*. Report prepared for the Consultative Group on Early Childhood Care and Development. UNICEF.

Chesterfield, R., & Rubio, F. (1997). *Cost effectiveness study of Nueva Escuela Unitaria (NEU) and Intercultural Bilingual Education (DIGEBI)*. Washington, DC: Academy for Educational Development. Unpublished report.

Christian, D. (1999). Looking at federal education legislation from a language policy/planning perspective. In T. Huebner & K.A. Davis (Eds.), *Sociopolitical perspectives on language policy and planning in the USA* (117-130). Amsterdam: John Benjamins.

Comisión Paritaria de Reforma Educativa. (1998). *Diseño de reforma educativa*. Guatemala City: Government of Guatemala & Members of the Indigenous Communities. Mimeo.

Congressional Oversight Committee on Education. (1994). *The language issue in education*. Manila and Quezon City: Congress of the Republic of the Philippines.

Cooper, R.L. (1989). *Language planning and social change*. Cambridge: Cambridge University Press.

Cummins, J. (2000). *Language, power and pedagogy: Bilingual children in the crossfire*. Clevedon, England: Multilingual Matters.

Davis, P. McK. (1994). *Literacy acquisition and retention among the Machiguenga of the Peruvian Amazon*. Unpublished doctoral dissertation, University of Texas, Arlington.

Diaz Caballeros, J.A. (1994). *La educación bilingüe: Un puente al desarrollo y a la equidad.* Mimeo.

Dutcher, N. (1998). Eritrea: Developing a programme of multilingual education. In J. Cenoz & F. Genesee (Eds.), *Beyond bilingualism: Multilinguals and multilingual education.* Clevedon, England: Multilingual Matters.

Dutcher, N., & Tucker, G. R. (1996). *The use of first and second languages in education.* Pacific Islands Discussion Paper, 1, East Asia and Pacific Region. Washington, DC: The World Bank.

Dutcher, N. (1982). *The use of first and second languages in primary education: Selected case studies.* World Bank Staff Working Paper No. 504. Washington, DC: The World Bank.

Enge, K.I., & Chesterfield, R. (1996). Bilingual education and student performance in Guatemala. *International Journal of Educational Development* 16, 291-302.

Fox, M.J. (1974). *Language education in developing countries: The changing role of the Ford Foundation.* New York: Ford Foundation.

Frederick, W.H., & Worden, R.L. (1992). *Indonesia: A country study.* Washington, DC: Federal Research Division, Library of Congress.

Freeman, R.D. (1998). *Bilingual education and social change.* Clevedon, England: Multilingual Matters.

Gobierno de Guatemala - AID. (1994). *Educación bilingüe intercultural.* Guatemala City: Editora Educativa. Descriptive pamphlet.

Gonzalez, A. (1998). Teaching in two or more languages in the Philippine context. In J. Cenoz & F. Genesee (Eds.), *Beyond bilingualism: Multilingualism and multilingual education.* Clevedon, England: Multilingual Matters.

Gonzalez, A. (1999). The language planning situation in the Philippines. In R.B. Kaplan & R.B. Baldauf, Jr. (Eds.), *Language planning in Malawi, Mozambique and the Philippines.* Clevedon, England: Multilingual Matters.

Grimes, B. F. (Ed.). (2000). *Ethnologue, languages of the world* (14th ed.). Dallas, TX: SIL International.

Harlech-Jones, B. (1998). *Viva English! Or is it time to review language policy in education?* National Institute for Educational Development (NIED) Reform Forum 6. Windhoek: Republic of Namibia, Ministry of Basic Education and Culture. URL: <http://www.nied.edu.na>.

Hernandez, N. (2001). *De la educación indígena a la educación intercultural: La experiencia de Mexico.* Speech presented at the First Hemispheric Indigenous Education Conference, Guatemala City, Guatemala.

Hornberger, N. (1989). *Bilingual education and language maintenance: A southern Peruvian Quechua case.* Dordrecht: Foris.

Hornberger, N., & López, L.E. (1998). Policy, possibility and paradox: Indigenous multilingualism and education in Peru and Bolivia. In J. Cenoz & F. Genesee (Eds.), *Beyond bilingualism: Multilingualism and multilingual education.* Clevedon, England: Multilingual Matters.

Hutchison, J. (1995). The politics of educational publishing in francophone Africa 1944-94. In J. Hutchison & M. Nguessan (Eds.), *The language question in francophone Africa.* West Newbury, MA: Mother Tongue Editions.

Hyltenstam, K., & Quick, B. (1996). *Fact finding mission to Bolivia in the area of bilingual primary education.* Report for SIDA. Stockholm: University of Stockholm. Mimeo.

Institute for International Research. (1999). *Namibia, Basic Education Support Project (BES), final report.* Arlington, VA.

King, E.M., & Hill, M.A. (Eds.). (1993). *Women's education in developing countries.* Baltimore, MD: The Johns Hopkins University Press for the World Bank.

Klaus, D. (2001). *The use of indigenous languages in early basic education in Papua New Guinea.* Paper presented at the Annual Conference of the Comparative and International Education Society, Washington, DC.

Komarek, K. (1996). *Mother-tongue education in sub-Saharan countries: Conceptual and strategic considerations for the promotion of mother-tongue education in Africa.* Eschborn, Germany: German Technical Cooperation Agency. Mimeo.

Lockheed, M.E., Verspoor, A.M., & Associates. (1991). *Improving primary education in developing countries.* New York: Oxford University Press for The World Bank.

López, L.E. (2000). Pedagogical issues in mother tongue and bilingual education. In *Language of instruction in basic education: Materials for distance learning course.* Washington, DC: World Bank Institute.

Malone, S.E. (1995). *Mother tongue education in multilingual contexts: Meeting the challenge in Papua New Guinea.* Paper presented at the World Bank. Mimeo.

Malone, S.E. (2001). When "Education for All" includes everyone: Providing relevant education for minority language communities. Paper presented at a World Bank seminar on Language of Instruction. Contact: <Susan_Malone@sil.org>.

Mexico. (1994). In *The New Encyclopaedia Britannica. Macropaedia.* Vol. 21. Chicago: Encyclopaedia Britannica.

Ministère de l'Education de Base. (1987-2000). *Annual reports.* Bamako, Mali.

Ministry of Education, Ethiopia, & U.S. A.I.D./Ethiopia. (1999, December). *BESO Bulletin.* Addis Ababa.

Muñoz, H. (publication date not available). *De proyecto a política del estado.* Mexico: Universidad Autónoma Metropolitana.

Muskin, J.A. (1999). Including local priorities to assess school quality: The case of Save the Children community schools in Mali. *Comparative Educational Review*, 43, 36-63.

Muskin, J.A. (1997). *An evaluation of Save the Children's community schools project in Kolondieba, Mali.* Washington, DC: Institute for Policy Reform.

Newspaper article on the Coalición de Maestros y Promotores Indígenas de Oaxaca. (March 29, 2001). Oaxaca: *Noticias.*

Oxfam International. (1999). Debt and education. In *Education now: Break the cycle of poverty.* Boston, MA.

Patrinos, H., & Velez, E. (1996). *Costs and benefits of bilingual education in Guatemala, a partial analysis.* Human Capital Development Working Paper No. 74. Washington, DC: The World Bank.

Perfil de la educación en Mexico. (1999). Mexico City, Mexico: Secretaría de Educación Pública.

Phillipson, R., & Skutnabb-Kangas, T. (1995). Linguistic rights and wrongs. *Applied Linguistics*, 16, 483-504.

Presidential Commission on Educational Reform. (1998-1999). Various documents. Executive Order, No. 46. PCER Chronicle, Issues 1, 2, 3. Manila. URL: <http://members.tripod.com/pcer_ph/index/htm>.

Programa de Apoyo al Sector Educativo en Guatemala (PROASE). (2001). Descriptive pamphlet. European Union and the Government of Guatemala.

Programa de Formación en Educación Intercultural Bilingüe para los Países Andinos (PROEIB ANDES). (1999). Boletín informativo mensual 40-45, Junio-Diciembre. URL: <http://www.proeibandes.org>.

Programa de Formación en Educación Intercultural Bilingüe para los Países Andinos (PROEIB ANDES). (2001a). Boletín informativo mensual 50. URL: <http://www.proeibandes.org>.

Programa de Formación en Educación Intercultural Bilingüe para los Países Andinos (PROEIB ANDES). (2001b). Boletín informativo mensual 51. URL: <http://www.proeibandes.org>.

Proyecto de Educación Maya Bilingüe Intercultural (PEMBI). (2001). Descriptive pamphlet. Government of Guatemala and German Technical Assistance (GTZ).

Proyecto MEDIR. (1999). *El estado actual de la educación bilingüe intercultural en Guatemala.* USAID/Guatemala.

Republic of Indonesia. *Constitution.* URL: <http://library.tamu.edu/govdocs/workshop/>.

Republic of the Philippines. *Constitution.* URL: <http://library.tamu.edu/govdocs/workshop/>.

Robinson, C. (1996). *Language use in rural development: An African perspective.* Berlin: Mouton de Gruyter. (Referred to in Tadadjeu, 1999).

Ruano, C.R. (2001). *La participación de las minorias nacionales dentro de sistemas educativos premodernos: El caso de los Garifunas de Guatemala.* Education Policy Analysis Archives, 9 (23).

Savane developpement: Volet education. (1997). In *Le Centre Scolaire Integre du Niéné: son passe, son present, ses besoins.* Abidjan: Université National du Côte d'Ivoire, Institut Linguistique Appliquée.

Save the Children/USA. (1993). *A step towards Education for All: Report on the first year of the Village Schools.* Kolondieba, Mali.

Secretary of Public Education. (2000). *Report on Primary Education Project and Second Primary Education Project.* Government of Mexico.

SIL International web site. URL: <http://www.sil.org>.

SIL International of Papua New Guinea. (1995). *A survey of vernacular education programming at the provincial level within Papua New Guinea.* Ukarumpa, Papua New Guinea.

Skutnabb-Kangas, T. (1994). Mother tongue maintenance: The debate, linguistic human rights and minority education. *TESOL Quarterly,* 28, 624-628.

Skutnabb-Kangas, T. (2000). *Linguistic Genocide in Education—or Worldwide Diversity and Human Rights?* Mahwah, NJ: Lawrence Erlbaum Associates.

Socialist Republic of Vietnam. *Constitution.* (URL: <http://www.politicalresources.net/vietnam>.

Tacelosky, K. A. (1998). *Sociolinguistic survey of bilingual education among the Shipibo of Amazonian Peru.* Unpublished doctoral dissertation, University of Texas, Arlington.

Tadadjeu, M. (1999). 3000 linguists needed in 15 years for the basic standardization of all African languages. Paper presented at the conference of the International Association for Applied Linguistics (AILA).

Tadadjeu, M., & Mba, G. (1996). L'utilisation dans les langues nationales dans l'education au Cameroun; les leçons d'une experience. *Travaux neuchatelois de linguistique (TRANEL),* 26, 59-76.

Teclemariam Tocrurai, D. (1995). *The use of mother tongue education in Eritrea.* Unpublished manuscript submitted to the International Linguistics Consultants Seminar.

Thomas, W. P., & Collier, V. (1997). *School effectiveness for language minority students.* Washington, DC: National Clearinghouse for Bilingual Education, The George Washington University.

Tietjen, K. (1999). *Community schools in Mali: A comparative cost study.* Washington, DC: Office of Sustainable Development, Bureau for Africa, U.S. Agency for International Development.

Trudell, B. (1993). *Beyond the bilingual classroom: Literacy acquisition among Peruvian Amazon communities.* Arlington, TX: SIL International and the University of Texas at Arlington.

Trudell, B. (2000). *Annual Literacy Report, Africa Area.* Nairobi, Kenya: SIL International.

Tucker, G.R. (In press). A global perspective on bilingualism and bilingual education. In J.E. Alatis (Ed.), *Proceedings of the Georgetown University Round Table on Languages and Linguistics, 1999.* Washington DC: Georgetown University Press.

United Mexican States. *Constitution.* URL: <http://library.tamu.edu/govdocs/workshop/>.

United Nations. (1990). *Convention on the Rights of the Child.* New York. URL: <http://www.unicef.org>.

UNESCO. (1953). *The use of vernacular languages in education.* Paris.

UNESCO. (1990). *Innovations and initiatives in teacher education in Asia and the Pacific Region. Vol. 1: Overview.* Bangkok: UNESCO Principal Regional Office of Asia and the Pacific.

UNESCO. (1999a). *Education for All 2000 assessment for Indonesia.* Central Jakarta: Ministry of Education and Culture. URL: <http://www2.unesco.org/wef/countryreports/indonesia/contents.html>.

UNESCO. (1999b). *Education for All 2000 assessment for the Philippines.* Pasig City: Department of Education, Culture and Sports. URL: <http://www2.unesco.org/wef/countryreports/philippines/contents.html>.

UNESCO. (1999c). *Education for All 2000 assessment for Vietnam.* Hanoi: Ministry of Education and Training. URL: <http://www2.unesco.org/wef/countryreports/vietnam/contents.html>.

UNESCO. (2000a). *Education for All 2000 assessment for Namibia.* URL: <http://www2.unesco.org/wef/countryreports/namibia/contents.html>.

UNESCO. (2000b). *Framework for Action.* World Education Forum website. URL: <http://www2.unesco.org/wef>.

UNESCO. (2001). *Education for All: First Anniversary of the World Education Forum (April 27, 2001).* No. 2001-65. URL: <http://www.unesco.org/opi/eng/unescopress/2001/01-65e.shtml>.

UNICEF Vietnam. (1998). *An evaluation of the multigrade and bilingual education project, Vietnam.* Hanoi.

UNICEF. (1999a). *The state of the world's children, 1999.* New York.

UNICEF. (1999b). *Reports from UNICEF Indonesia and Philippines.* (Received via e-mail from Karen Skeet.)

UNICEF. (2000). *The state of the world's children, 2000.* New York.

United States Agency for International Development. (1994). *U.S. A.I.D./Ethiopia Basic Education System Overhaul (BESO), program summary.* Addis Ababa, Ethiopia.

United States Agency for International Development. (1999). *Improving girls' education in Guatemala.* Arlington, TX: Development Experience Clearinghouse.

United States Agency for International Development. (2000). *U.S. A.I.D./Ghana: Implementation of the school language policy in Ghana, interim report.* Improving Educational Quality (IEQ) Project. Cape Coast, Ghana: Centre for Research in Quality Primary Education in Ghana (CRIQPEG), and Washington, DC: American Institutes for Research.

US Library of Congress website. URL: <http://lcweb2.loc/gov/frd/cs/idtoc/html>.

Vaillancourt, F., & Grin, F. (2000). The choice of a language of instruction: The economic aspects. In *Language of instruction in basic education, 2000: Materials for distance learning course.* Washington, DC: World Bank Institute.

Verhoeven, L., & Aarts, R. (1998). Attaining functional literacy in the Netherlands. In A.Y. Durgunoglu & L. Verhoeven (Eds.), *Literacy development in a multilingual context: Cross-cultural perspectives*, 111-134. Mahwah, NJ: Lawrence Erlbaum Associates.

Wagner, D.A. (1998). Putting second language first: Language and literacy learning in Morocco. In A.Y. Durgunoglu & L. Verhoeven (Eds.), *Literacy development in a multilingual context: Cross-cultural perspectives*, 169-183. Mahwah, NJ: Lawrence Erlbaum Associates.

Walter, S.L., Davis, P.M., & Morren, R. (1999). *Explaining multilingual education: Information on some tough questions*. Dallas, TX: SIL International. (Prepublication draft.)

Wambach, M. (1995). *Convergent pedagogy.* Brussels: Centre International Audio-Visuel pour l'Education et la Recherche (CIAVER).

Wedekind, K., Dutcher, N., & Language Panels of the Curriculum Research and Development Division, Ministry of Education. (1996). *Assessment of mother tongue education in Eritrea.* Asmara, Eritrea: Ministry of Education. (Unpublished report).

Williams, E. (1996). Reading in two languages at Year 5 in African primary schools. *Applied Linguistics* 17, 183-209.

World Bank. (1993). *Staff Appraisal Report, Vietnam, Primary Education Project.* Washington, DC.

World Bank. (1994a). *Staff Appraisal Report, Mexico, Second Primary Education Project.* Washington, DC.

World Bank. (1994b). *Staff Appraisal Report, Bolivia Education Reform Project.* Washington, DC.

World Bank. (1995). *The development data book.* Washington, D.C.

World Bank. (1996). *Project Appraisal Document, Philippines, Third Elementary Education Project.* Washington, DC.

World Bank. (1997). *Project Appraisal Document, Guatemala, Basic Education Reform Project.* Washington, DC.

World Bank. (1999). *Human Development Network. Education Sector Strategy.* Washington, DC.

World factbook. (1999). Washington, DC: Central Intelligence Agency.

Persons Consulted

Jayshree Balachander, World Bank Office, Manila
Penelope Bender, consultant, formerly with World Bank, Washington, DC
Michael Bopp, National Research Institute, Papua New Guinea (1993)
Ray Chesterfield, Juárez Associates, Washington, DC
Helen Craig, Academy for Educational Development, Washington, DC
Koffi Edoh, World Bank, Washington, DC
Frank Fairchild, U.S. A.I.D. (1987)
Elaine Furniss, UNICEF, New York
Karl Franklin, SIL International, Texas
Elisabeth Gfeller, SIL International, Ethiopia
Alfonso F. de Guzman, World Bank, Washington, DC
Simon Ju, American Institutes for Research, Washington, DC
David Klaus, World Bank, Washington, DC
Grace Lang, World Bank, Washington, DC
Susan Malone, SIL International, Australia
David S. McCurry, Monmouth University, New Jersey
Frank Method, UNESCO, Washington, DC
Joshua Muskin, World Learning, Washington, DC
Ruth Ray, SIL International, Papua New Guinea
Fernando Reimers, Harvard Graduate School of Education, Cambridge, MA
Julia Richards, U.S. A.I.D./Guatemala
Kay Ringenberg, SIL International, Indonesia
Carlos Rojas, World Bank, Washington, DC
Fernando Rubio Flores, Juárez and Associates, Inc., Guatemala
Karen Ann Skeet, UNICEF, New York
Binh Thanh Vu, World Bank Office, Hanoi
Thomas Tilson, Academy for Education Development, Ethiopia (1996)
G. Richard Tucker, Carnegie Mellon University, Pennsylvania
Eduardo Velez Bustillo, World Bank Office, Mexico City
Catherine Young, SIL International, Philippines
Stephen L. Walter, SIL International, Texas
Fred Wood, Save the Children/USA, Westport, CT

Center for Applied Linguistics
4646 40th Street, N.W.
Washington, D.C. 20016-1859

Telephone: (202) 362-0700
Fax: (202) 362-3740

E-mail: info@cal.org
www.cal.org

BEST COPY AVAILABLE

FL027356

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)

ERIC

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Expanding Educational Opportunity in Linguistically Diverse Societies

Author(s): Nadine Dutcher

Corporate Source: Center for Applied Linguistics

Publication Date: October 2001

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

☑

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

☐

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here please

Signature: Donna Christian	Printed Name/Position/Title: Donna Christian	
Organization/Address: Center for Applied Linguistics 4646 40th St NW, Washington DC	Telephone: 202-362-0700	FAX:
	E-Mail Address: donna@cal.org	Date: 6/26/02

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS).

Publisher/Distributor:
Address:
Price Per Copy:
Quantity Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant a reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V.WHERE TO SEND THIS FORM:

You can send this form and your document to the ERIC Clearinghouse on Languages and Linguistics, which will forward your materials to the appropriate ERIC Clearinghouse.

Acquisitions Coordinator
ERIC Clearinghouse on Languages and Linguisitics
4646 40th Street NW
Washington, DC 20016-1859

(800) 276-9834/ (202) 362-0700
e-mail: eric@cal.org